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Service Helps RRs

September 14, 1959

RAILWAY AGE *weekly*



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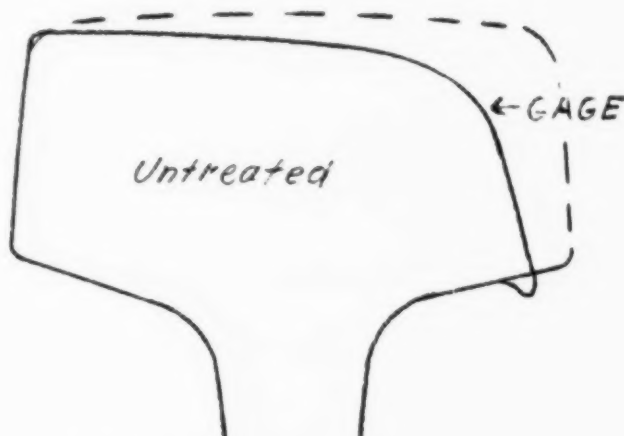
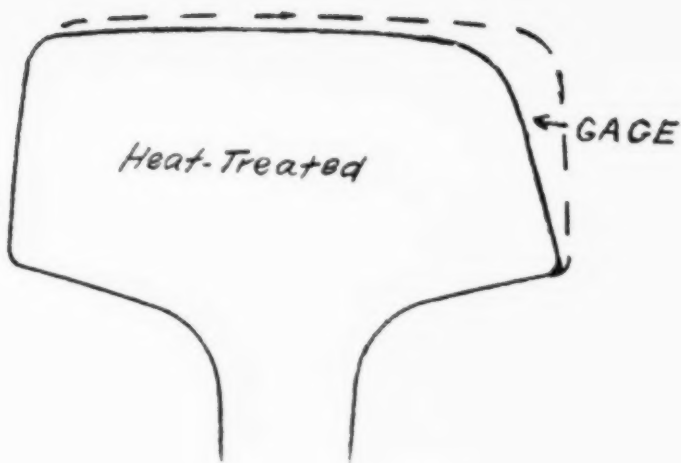
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RRS hail Paint Case victoryp. 9

The first proposal to come out of the eastern roads' rate-research program has won ICC approval. The extent to which the new rates are used, says one leading eastern spokesman, may determine future rate-making policy.

Cover Story—How machines speed restoration workp.17

The traditional wrecking crane has plenty of help these days when cleaning up after train accidents. Bulldozers, trucks, highway cranes and track maintenance machines are typical of the supplementary equipment used.

Cover Story—Missiles by railp.24

A missile defense system using railroad cars as launching platforms has been proposed by ACF Industries and American Machine & Foundry. The system was disclosed at the Air Force Association's "Aerospace Panorama" in Miami Beach.

Radio cuts stores dept. costsp.36

The C&O has utilized radio to boost the efficiency of its system stores operation at Huntington, W. Va. The radio installation has exceeded the road's original expectations.

'Hidden' costs can be reducedp.39

Here are eight easy-to-overlook places where railroads may be missing chances for significant cost reductions.

Cover Story—Trailer repair service helps RRsp.43

A complete repair service on empty and loaded piggyback trailers is available to railroads in the Chicago area. Any combination of separate or special service, up to complete general servicing, is offered.

Big ACL hoppers move chipsp.49

To help meet rapidly increasing demand, Coast Line has custom-built 200 jumbo-sized hoppers to handle wood chips.

Harriman award winners namedp.50

Gold medals for safety will go to the Union Pacific, Cotton Belt and New York, Susquehanna & Western. Eleven other roads will receive Certificates of Commendation at a dinner in New York City this week.



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Week at a Glance CONT.

Current Statistics

Operating revenues	
7 mos., 1959	\$5,847,512,418
7 mos., 1958	5,329,684,214
Operating expenses	
7 mos., 1959	4,562,546,451
7 mos., 1958	4,353,181,571
Taxes	
7 mos., 1959	632,589,611
7 mos., 1958	502,477,821
Net railway operating income	
7 mos., 1959	462,965,823
7 mos., 1958	300,654,566
Net income, estimated	
7 mos., 1959	337,000,000
7 mos., 1958	203,000,000
Average price railroad stocks	
Sept. 8, 1959	104.16
Sept. 9, 1958	88.28
Carloadings revenue freight	
35 wks., '59	21,114,756
35 wks., '58	19,594,989
Freight Cars on order	
Aug. 1, 1959	40,309
Aug. 1, 1958	25,994
Freight cars delivered	
7 mos., 1959	22,545
7 mos., 1958	31,658

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Marketing concept gets resultsp.54

Western Pacific's new approach to freight sales was well on its way to achieving its initial goal—a 20% increase in carloadings—until labor trouble hit the West, says Vice President—Marketing Malcolm W. Roper.

Riders up, so are RR's lossesp.56

As Philadelphia begins its second experiment in lower rates and more frequent service to boost use of suburban rail facilities, the Reading has released figures on the first six months of the first experiment showing that it did draw more riders, also lost the railroad more money.

New products to help the engineerp.58

A description of nine new and improved products and machines for railroad engineers and maintenance-of-way forces.

P&LE builds special cars for steel trafficp.64

The road has built 102 special cars this year as its contribution to boosting steel traffic on the railroads. All were constructed at the P&LE's McKees Rocks shops.

The Action Page—Doing the 'impossible' in M/Wp.72

Achievement of the seemingly impossible has become routine for railroad maintenance-of-way officers. Their problem, basically, stems from the assignment to maintain properties adequately with little or no increase in allotments to compensate for steadily rising wages.

Short and Significant

First step toward a possible national rules movement . . .

will be taken soon by the BLF&E, when general committees on individual properties begin voting on a program formulated Aug. 31-Sept. 4 in Chicago. Reports indicate the Firemen are studying a nine-point program, with something old, something new: Demands made previously but never successfully, plus demands with a new slant (presumably to meet the carriers' expected attempt to start eliminating firemen in yard and freight service).

Pullman-Standard has completed . . .

the first freight car order placed by a railroad with financing under the loan guaranty provision of the 1958 Transportation Act. The order: 100 PS-1 box cars for the Georgia & Florida. The road's application for guaranty of a \$934,960 loan was approved by the ICC last May (RA, May 18, p. 7).

DOWN THE DRAIN !



for the ASSOCIATION OF AMERICAN RAILROADS

RRs Hail Paint Case Victory

► **The Story at a Glance:** Eastern railroads have won the so-called Paint Case, which involves the first proposal to come out of their rate-research program.

The ICC has found the proposed rates lawful, thus sanctioning the eastern roads' plan of developing competitive rates based on out-of-pocket costs (as a "floor," but not as a "ceiling") and on railroad conditions—without reference to relationship to charges of competitors.

The Commission made it clear that it had the 1958 Transportation Act's rate-freedom provisions in mind. But Commissioner Webb, in a concurring opinion, complained that the majority report "left unanswered" the "vitally important question" of the extent, "if any," to which the 1958 act changed the rule of competitive rate making.

The ICC's decision in the Paint Case may not have been, as Commissioner Webb put it, the "landmark decision" the parties had hoped for. But in eastern railroad circles it was generally hailed with satisfaction.

E. V. Hill, chairman of the Traffic Executive Association, Eastern Railroads, said the ICC's findings were "most welcome" to eastern roads, and added:

"The extent to which shippers and receivers of this traffic make use of the approved rates and the theory of rate-making they represent—i.e., the right of one mode of transportation to price its services in reference to its own abilities without regard to the effect upon another—may very well determine the future rate-making policy of the eastern railroads.

"While the instant decision was not apparently based upon that premise, as noted in the concurring opinion of Commissioner Webb, and although, as he said, 'that vitally important question is left unanswered,' the decision, however predicated, nevertheless approves a basis for rates on paint, at least, which as explained in the carriers' evidence and briefs, left no doubt in the minds of any interested party concerning the intentions of rail respondents to make such rates as would cover their costs and increase their participation in this traffic substantially."

A statement from Jervis Langdon,

Jr., vice president and general counsel of the Baltimore & Ohio, who was principal counsel for the eastern roads in the Paint Case, also underscored the importance of the ICC decision.

"The rail rates approved in the Paint Case," said Mr. Langdon, "bear no fixed relation to the truck rates or the costs to the shipper of using truck service. On the contrary, the rates were made on the basis of railroad conditions with an eye to maximizing net revenues over and above long-term out-of-pocket costs. In approving them, the Commission held that this did not constitute an unfair or destructive competitive practice.

"This is important because in the past railroad traffic people have felt under obligation differentially to relate their rates to the costs to the shippers of using the competing form of transportation. The decision is also important in upholding the use of out-

of-pocket costs as the proper yardstick for measuring the compensatory character of rail rates.

"This should dispose of the argument of our competitors—an argument that reflects phony economics and bad law—that only full or fully distributed costs should be used in this connection. In many cases and because of greater volume the railroads can make more 'net' from rates that are less than full costs than from rates that 'cover' such costs on paper."

The decision, dated Aug. 27, was made public Sept. 4. In addition to the Webb expression, it had other addenda revealing that Commissioner Arpaia did not participate, that Commissioner Freas "concurs in the result," and that Commissioner Murphy subscribes to the majority report except for the "implication" it leaves when it refers to a case still pending.

A document of 17 mimeographed

Commissioner Webb's Concurring Opinion

"Although I agree that the proposed rates are lawful, I do not believe that the report adequately explains the legal basis for this finding.

"The transportation world has regarded this proceeding as bringing squarely into issue the legislative purpose and effect of section 15a (3) of the Interstate Commerce Act. Counsel for respondents said in oral argument: 'Frankly, I would rather lose this case than to get a decision which allows the rates to go in but under conditions which still leave us up in the air.' Counsel for National Industrial Traffic League expressed the hope that our decision would be explained in such a way that 'the railroads will know, the shipping public will know, and other modes of transportation will know, where the Commission stands and where transportation stands in pricing its services.' The brief filed for protestants makes it abundantly clear that they, too, expected this proceeding to produce a landmark decision.

"I do not see how this report sheds any light on the meaning of section 15a (3) except possibly for carriers and shippers of paint in official territory at the rates proposed. For more than a year a debate has been raging concerning the extent, if any, to which the rule of competitive rate making was changed by the Transportation Act of 1958. That vitally important question is left unanswered. Carriers, shippers, and the courts are entitled to a much clearer expression of the Commission's views than is given in this report."

sheets, the majority report highlights evidence which is "convincing that the proposed rates are reasonably compensatory, are needed by the respondents for the intended purpose of attracting traffic to their rails, and would not constitute an unfair or destructive competitive practice in contravention of the national transportation policy."

The rates are scheduled to become effective Oct. 31, the date to which they were voluntarily postponed by the railroads (by ICC request) after the Commission had used its suspension power to the limit. That limit came May 1, the rates having been suspended after they were published originally to become effective Oct. 1, 1958.

The rates are based on distances, and the base rates are subject to a minimum weight of 30,000 lb. Incentive rates approximately 10% lower than the base rates will apply on the next 30,000 lb, and about 25% lower on any weight in excess of 60,000 lb.

The base rate from Detroit, Mich., to New York, for example, is 79 cents per 100 lb. Incentive rates for the next 30,000 lb and for the excess above 60,000 lb, are 71 cents and 59 cents, respectively. In addition, the rates are

subject to minimum charges per carload of \$110 for distances not exceeding 140 miles and progressively higher charges up to \$180 at 440 miles. Detroit-New York truck rates are \$1.24, minimum 30,000 lb and \$1.18, minimum 35,000 lb.

Railroad cost evidence indicated that the rates would yield a weighted average revenue per car of \$330, and that the average out-of-pocket cost would be \$211 per car. Thus, the average excess above out-of-pocket costs would be \$119 per car, or 56%.

As the Commission pointed out, the avowed purpose of the rates is to regain paint traffic which has gone to competing agencies, and thus maximize the eastern roads' net revenue from that business. The Commission went on to note the railroads' contention that:

"This is a normal and lawful purpose, that the proposed rates will yield returns above their out-of-pocket costs; that the recovery of some of this traffic from the motor carriers and other competitors is a normal incident to fair competition; and that the express 'shall not' in Section 15a(3) of the Interstate Commerce Act means that under these conditions, where rates are com-

pensatory and non-discriminatory, the Commission may not prevent their establishment."

Section 15a(3) is the 1958 act's rate-freedom provision. Its "shall not" is the sentence which says "rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation, giving due consideration to the objectives of the national transportation policy declared in this act." The section also says that in a proceeding involving competition between carriers of different modes of transportation, the Commission, "in determining whether a rate is lower than a reasonable minimum rate, shall consider the facts and circumstances attending the movement of traffic by the carrier or carriers to which the rate is applicable."

Protesting motor carriers challenged the railroad interpretation of the section. They contended that railroad hopes of regaining traffic failed to consider how truckers can retaliate—and "will do so if the proposed reductions are allowed." The National Industrial Traffic League supported the railroads, urging approval of the rates in a deci-

(Continued on page 32)

Watching Washington *with Walter Taft*

• **THE TRACK-CAR BILL** can't be amended to eliminate its featherbedding threat without making it meaningless. That's advice the Surface Transportation subcommittee of the Senate's Interstate Commerce Committee has from President Daniel P. Loomis of the AAR. Management's opposition to the bill was expressed by Mr. Loomis and J. M. Hood, president of the American Short Line Railroad Association, at hearings before the subcommittee last week. The bill, supported by the ICC as well as railroad labor unions, would give the Commission power to prescribe rules for the operation of track motor cars.

A RECORD DESIGNED to present it as a "safety" measure with no "make-work" objectives had been made at previous hearings before the subcommittee. Labor representatives then insisted that nothing in the bill would create a single additional job. And subcommittee members suggested addition of a provision like that in the act passed last year to give the ICC authority to prescribe rules for the inspection, testing and maintenance of train brakes. That provision says Commission-prescribed brake rules must be "solely for the purpose of achieving safety."

ICC ADMINISTRATION of this brake act was cited by Mr. Loomis to support his contentions. He called attention to how the Commission's Division 3 took a

"technical" position in denying several railroads relief from the testing-every-500-miles rule (RA, Aug. 17, p. 34). As the AAR president pointed out, the railroads have filed a petition asking the entire Commission to reconsider these Division 3 rulings. It's significant to Mr. Loomis that unions representing telegraphers and employees in train and engine service did not appear in support of the bill, and are thus not parties to the claim that no new jobs would be created. He pointed out, however, that these are the employees who would claim rights to jobs on track cars and other work equipment if such equipment were required to be operated under train orders.

SHORT-LINE RAILROADS are especially alarmed about the bill, Mr. Hood reported. He explained that many of them still depend on the Morse Code and thus lack the more flexible communication systems of the larger roads. Also, lack of access roads to their properties would prevent many of the short lines from substituting off-track equipment for track cars. Passage of the bill will not come at this session of Congress which is about to end. It was not cleared by the Senate Interstate Commerce Committee when that committee met last week for what was expected to be its final executive session of this year. The bill will remain alive, however, because it's the same Congress that will meet next year.



GRAND CANYON LINE



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SUNSET LINES



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LINE OF THE BLUE STREAK



RAIL DESIGNS



ROUTE OF ROCKETS



MAIN STREET OF THE
NORTHWEST



THE NORTHWEST'S
OWN RAILWAY



ROUTE OF EMPIRE BUILDER

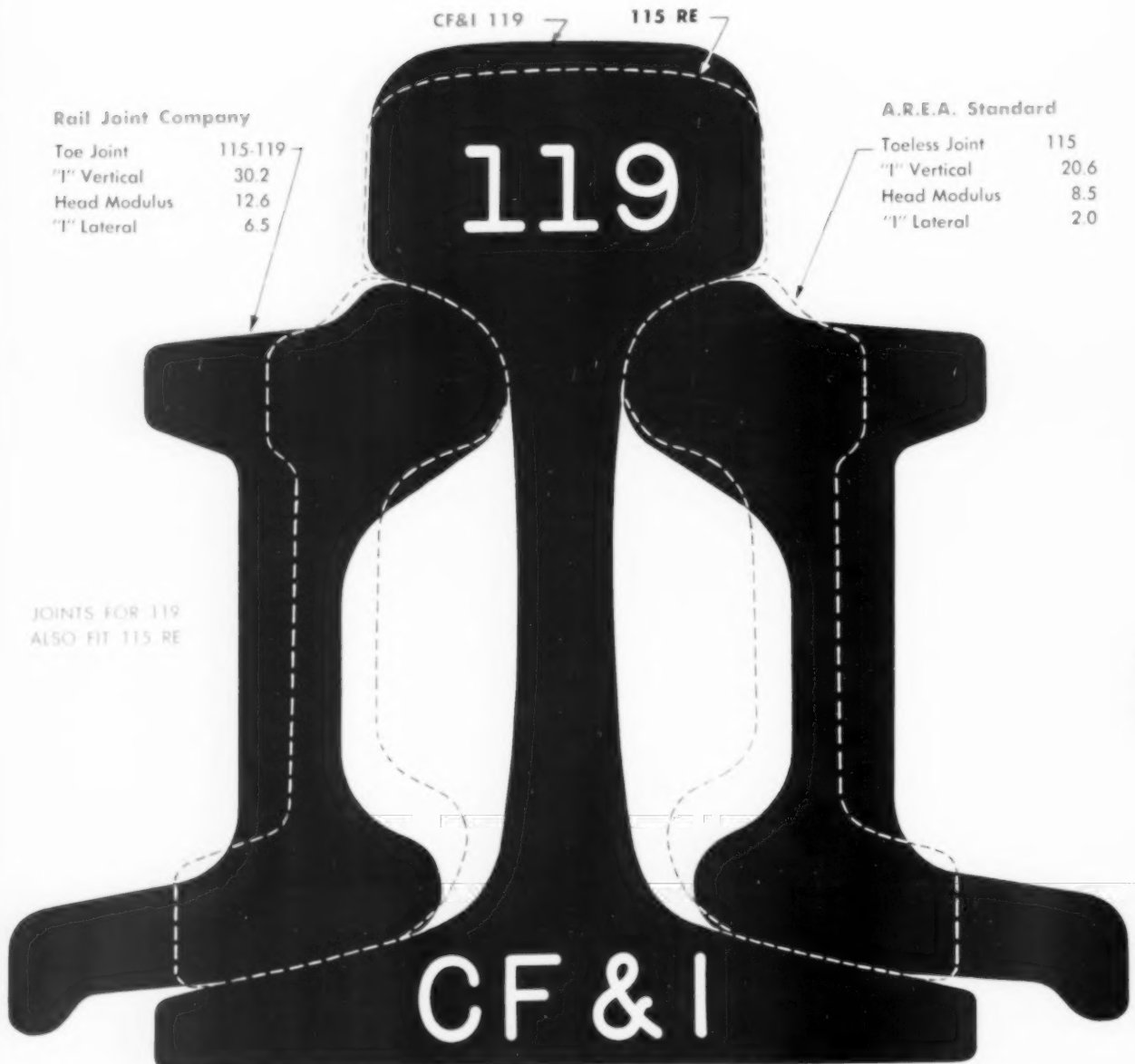


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achieving economic
objectives of
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PROPERTIES OF SECTIONS

ITEM	SECTIONS	
	115 RE	CF&I 119
AREA: HEAD	3.91 Sq. In.	4.32 Sq. In.
WEB	3.05 Sq. In.	3.04 Sq. In.
BASE	4.29 Sq. In.	4.29 Sq. In.
TOTAL	11.25 Sq. In.	11.65 Sq. In.
Weight per yard	114.7 lbs.	118.8 lbs.
N.T./mile — single track	202.4	209.4
Moment of Inertia "I"	65.6	71.4
Section Modulus, Head	18.0	19.4
Section Modulus, Base	22.0	22.9
Ratio, "I" to Area	5.83	6.13
Ratio, Section Modulus, Head — Area	1.6	1.7
Distance, Base to N.A.	2.98"	3.124"



Maximum Web Stress	psi	
	119 CF&I	13,400
	115 RE	15,200 13%

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Toe Joint	132-136
"I" Vertical	43.2
Head Modulus	16.6
"I" Lateral	9.6

A.R.E.A. Standard

Toeless Joint	132
"I" Vertical	29.7
Head Modulus	11.3
"I" Lateral	2.9

JOINTS FOR 136
ALSO FIT 132 RE

CF & I

PROPERTIES OF SECTIONS

ITEM	SECTIONS	
	132 RE	CF&I 136
AREA: HEAD	4.42 Sq. In.	4.86 Sq. In.
WEB	3.66 Sq. In.	3.62 Sq. In.
BASE	4.87 Sq. In.	4.87 Sq. In.
TOTAL	12.95 Sq. In.	13.35 Sq. In.
Weight per yard	132.1 lbs.	136.2 lbs.
N.T./mile — single track	232.3	239.4
Moment of Inertia "I"	88.2	94.9
Section Modulus, Head	22.5	23.9
Section Modulus, Base	27.5	28.3
Ratio, "I" to Area	6.8	7.1
Ratio, Section Modulus, Head — Area	1.7	1.8
Distance, Base to N.A.	3.2"	3.347"

Maximum Web Stress

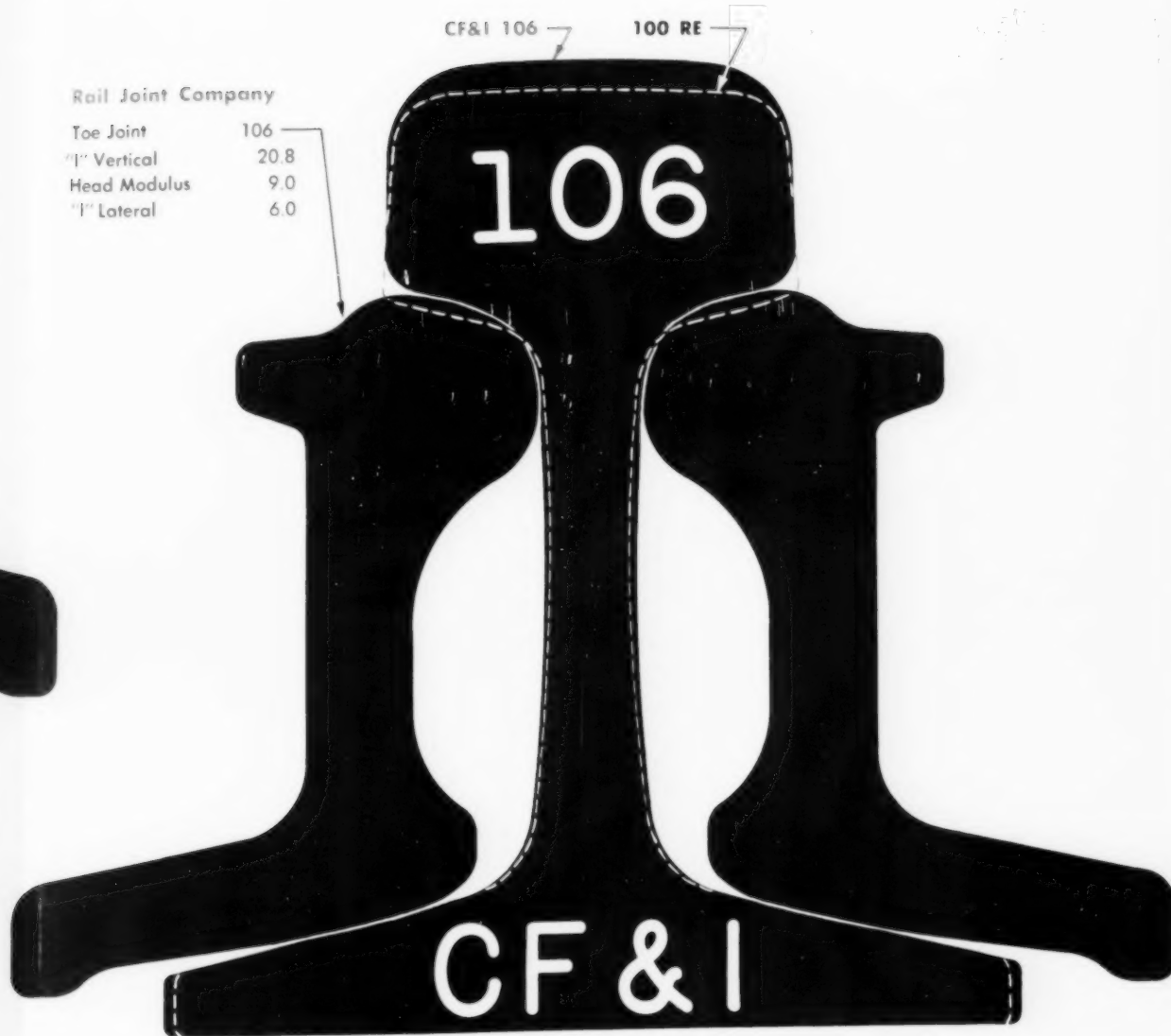
	psi	
136 CF&I	10,800	
132 RE	13,300	23%

PROPERTIES OF SECTIONS

ITEM	SECTIONS	
	100 RE	CF&I 106
AREA: HEAD	3.80 Sq. In.	4.00 Sq. In.
WEB	2.25 Sq. In.	2.50 Sq. In.
BASE	3.90 Sq. In.	3.95 Sq. In.
TOTAL	9.95 Sq. In.	10.45 Sq. In.
Weight per yard	101.5 lbs.	106.6 lbs.
N.T./mile — single track	178.64	187.6
Moment of Inertia "I"	49.00	53.6
Section Modulus, Head	15.1	16.1
Section Modulus, Base	17.8	18.8
Ratio, "I" to Area	4.9	5.1
Ratio, Section Modulus, Head — Area	1.5	1.5
Distance, Base to N.A.	2.75"	2.85"

Rail Joint Company

Toe Joint	106
"I" Vertical	20.8
Head Modulus	9.0
"I" Lateral	6.0



Maximum Web Stress	psi	
	106 CF&I	100 RE
	18,700	27,300
		46%

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Recognizing the desirability of developing a rail affording greater resistance to shelling and curve wear, CF&I and Western Railroads have cooperated in verifying the relative merits of High Silicon Rail versus Carbon Steel Rail.

Hi-Si[®] rail, with a silicon range greater than that stipulated in AREA Specifications, provides greater resistance to gage corner shelling and assures substantially reduced curve wear. Performance 50 to 100% better than Standard Carbon Rail has been confirmed by contours and field investigations of test locations and extensive additional installations on Western Railroads.

Recognition of the value of track betterment has prompted installation of CF&I's new sections and of Hi-Si[®] steel in areas where excessive wear is encountered. CF&I has accomplished through metallurgy what the 136, 119, and 106-pound rail sections have achieved through improved design.



THE COLORADO FUEL AND IRON CORPORATION

DENVER, COLORADO

This insert will appear in Railway Age, July 13; Railway Track and Structures, August; and Railway Age September 14, 1959



WRECKER CRANE lays rail while D-8 bulldozer prepares roadbed and another D-8 snags rails to point of use.

How Machines Team Up...



WHEN THE WIND caused this car to roll past the derail a nearby crawler crane was drafted to rerail it.

...To Speed Restoration Work

Like other types of railroad work, the handling of wrecks is more highly mechanized today than ever before. When a derailment occurs these days, a wide array of equipment is started immediately on its way to the site of trouble.

In that array, the big "hook" still plays a key role, but it is now supplemented by a variety of other types of equipment. This ranges all the way from walkie-talkie sets to wheel and crawler-mounted machines capable of handling derailed cars, rebuilding the roadbed and tracks, and handling materials and spilled lading at a clip that would astonish an old-time wreck-master.

What's the reasoning behind this trend to mechanize the handling of derailments? Primarily, it's to speed up

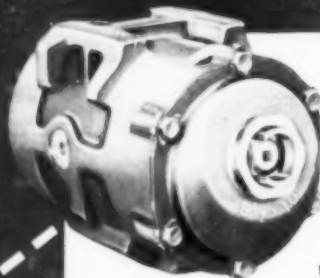


EQUIPMENT trailers and flat-beds are invaluable for conveying off-track work equipment over highways to the derailment site.

KAR-GO Bearings



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in
interchange
service*

Having complied with standardization details, AAR approval has been obtained for wider application to freight cars in general interchange service.

Keeps lubricant sealed in — dirt sealed out.

Averages one inspection every 20,000 car miles.

Repays its cost in two years by cutting maintenance and operating expense.

Goes 75,000 bearing miles on 1 pint of oil.

Offers railroads a low-cost solution to the hot-box problem.

end hot boxes at rock-bottom price

YOUR RAILROAD is running longer trains on faster schedules—heavier duty on the equipment. Why take a chance that a hot box will disrupt schedules, disappoint customers and increase costs?

Lowest-cost Allison KAR-GO Cartridge Bearings whip the hot-box problem at a kind-to-budgets price.

Millions of in-service railway miles and three years of rugged field testing prove the worth of KAR-GO Cartridge Bearings. This full-round sleeve bearing provides rugged low-cost features together with the advantages of sealed-in, low maintenance units in a way

that no “gadgetized” journal brass can approach.

An Allison KAR-GO Bearing will actually pay for itself in two years by reducing routine maintenance and service failure cost. Subsequently additional KAR-GO Bearings can be added to your new car fleet from savings in hot-box elimination alone.

To be sure to keep your equipment operating on schedule with a bearing that ends hot boxes and cuts terminal inspection and oiling time—a bearing you can really rely on—install Allison KAR-GO Cartridge Bearings on your next conversion or new freight car build.

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS, Indianapolis 6, Indiana

Allison **KAR-GO**
JOURNAL BEARINGS

*A product of and built only by the
Allison Division, General Motors*

Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison bearings.





TEAMING UP with a wrecker crane, a TD-14 bulldozer pushes wreckage aside so less-damaged cars can be rerailed and salvaged.



WRECKER TRUCK in use on the North Western has six-wheel drive and is equipped with a 125-cfm compressor, a 45,000-lb winch and a monorail 18 ft. long. Here it's carrying a replacement truck.

restoration work, say railway officers. Costs are, of course, reduced, they point out, but the primary objective is to get the line back into operation as quickly as possible.

The faster pace of restoration is achieved partly by the use of equipment that can be sped to the site at high speed and on short notice. Included are not only rubber-tired cranes and other units that move over the highways under their own power, but crawler-mounted tractors and cranes that are hauled to the job on flat-bed trailers. Access roads, being built along the right of way by most roads for the off-track equipment used by their maintenance forces, are helpful in getting equipment to the site of wrecks.

However, the need for getting conventional wrecker cranes to the job as quickly as possible isn't being overlooked. One road, by redesigning the trucks and propelling mechanisms of its wrecking cranes, has rendered them capable of being moved over the line at freight-train speeds.

Getting equipment to the location of a wreck at the earliest possible moment is one way of speeding the restoration of traffic. Another is to use a combination of equipment that will make it possible to carry out all phases of the restoration work—removal of derailed equipment and reconstruction of road-bed and tracks—more or less simultaneously, with no part of the job being delayed because of a lack of equipment or material.

Here's where you find on-track and off-track equipment working as a team. While the wrecking cranes are working from the ends, the off-track units—bulldozers, cranes, trucks—are doing their part beyond the reach of the on-track equipment.

Almost indispensable at derailments these days is the crawler bulldozer. Sometimes it's brought to the site on a flat car in the wreck train. At other times it may come to the job riding on a flatbed trailer over the highways. Once at the site it becomes a versatile tool for doing a variety of necessary jobs.

With the aid of a rolling cable hitch, the bulldozer can roll cars out of the way. Where the track is badly damaged the bulldozer is used to remove twisted rails and broken ties, as well as to smooth the roadbed. It often is used to drag rails to points where they are needed and to move spilled lading, such as coal, sand and ore. If inflammable lading, such as gasoline or oil, is leaking from derailed cars, the bulldozer can be used to cut ditches for draining the fluids away from the scene.

To realize its full usefulness, say railway men, the bulldozer should be equipped with a heavy-duty winch and

at least 100 ft of cable. The latter, they add, should have a diameter of at least 1 in. to withstand the strains imposed by this rigorous service.

The fact that the bulldozer has proved so useful at derailments has led to the development of a crawler unit especially designed for such use. Principal feature of this unit is a 20-ft side boom with a lifting capacity of 68 tons, more than sufficient to lift one end of a car. A powerful winch on the unit is reported to make it possible to shift cars by skidding instead of rolling. Another feature is an inside-mounted bulldozer for pushing cars clear of the tracks or for doing standard dozing chores.

Special Wreck Trucks

Another type of equipment coming into increasing use at wrecks consists of specially equipped wreck trucks. Railroad men say these units are advantageous because they can be dispatched to a trouble spot almost immediately. The experience with these trucks indicates that best results are obtained when they are kept at strategic points on the division to reduce travel time. They are generally equipped with ample blocking, rerailing devices, chains, tow ropes, 50-ton car jacks and large-capacity winches.

Trucks of various types are playing an increasingly important role in helping to cope with train accidents. One road that maintains a fleet of highway trucks for welders repairing trackwork, reports it invariably dispatches one of the units to the scene of a derailment. There is almost always a need for the oxyacetylene cutting torches carried by the trucks, and their generators also provide a source of power for the floodlights needed to illuminate night work.

Trucks are also used by some roads for collecting and hauling men in emergencies, such as derailments. They are reported to save much time in hauling necessary material and tools to the scene of the accident, as well as from one spot to another at the wreck site. Spilled lading is often salvaged with the aid of trucks.

There are always plenty of jobs for cranes at train accidents. For lifting and handling locomotives, wrecker cranes with capacities from 150 to 250 tons are needed, although on-track cranes of lesser capacities are also used. The latter frequently are multi-purpose units which are also used as pile drivers and bridge derricks.

Off-track cranes are also useful and welcome at derailments. These include truck-mounted cranes which not only can move around the vicinity as needed, but which also can reach over and lift the key car of a "jack-straw"

wreck pattern. They can, in addition, be used to rerail trucks and recover debris beyond the reach of on-track cranes. Working alone, they can rerail cars in yards and along industrial tracks.

Because of the valuable service rendered by truck cranes and bulldozers at derailments, at least one road has set up a system to assure that such units can be rushed to the site of trouble with minimum loss of time. It has established what it calls auxiliary off-track wrecking headquarters. At each such location it headquarters a 20-ton truck crane and a highway truck-tractor hauling a heavy-duty semi-trailer on which is carried a crawler bulldozer with a rear-end power winch.

This equipment is in regular use for routine maintenance operations. At the close of each day's work the units are returned to their headquarters and held ready for emergency call. Because of the weight and size of this equipment, the operators have been provided with special road maps of the main and secondary highways covering the territories in which the units may have to be moved. Special arrangements have been made with state highway departments to permit movement of the equipment without delays that might otherwise be

involved while permits were being obtained. In some cases the equipment is escorted by state police.

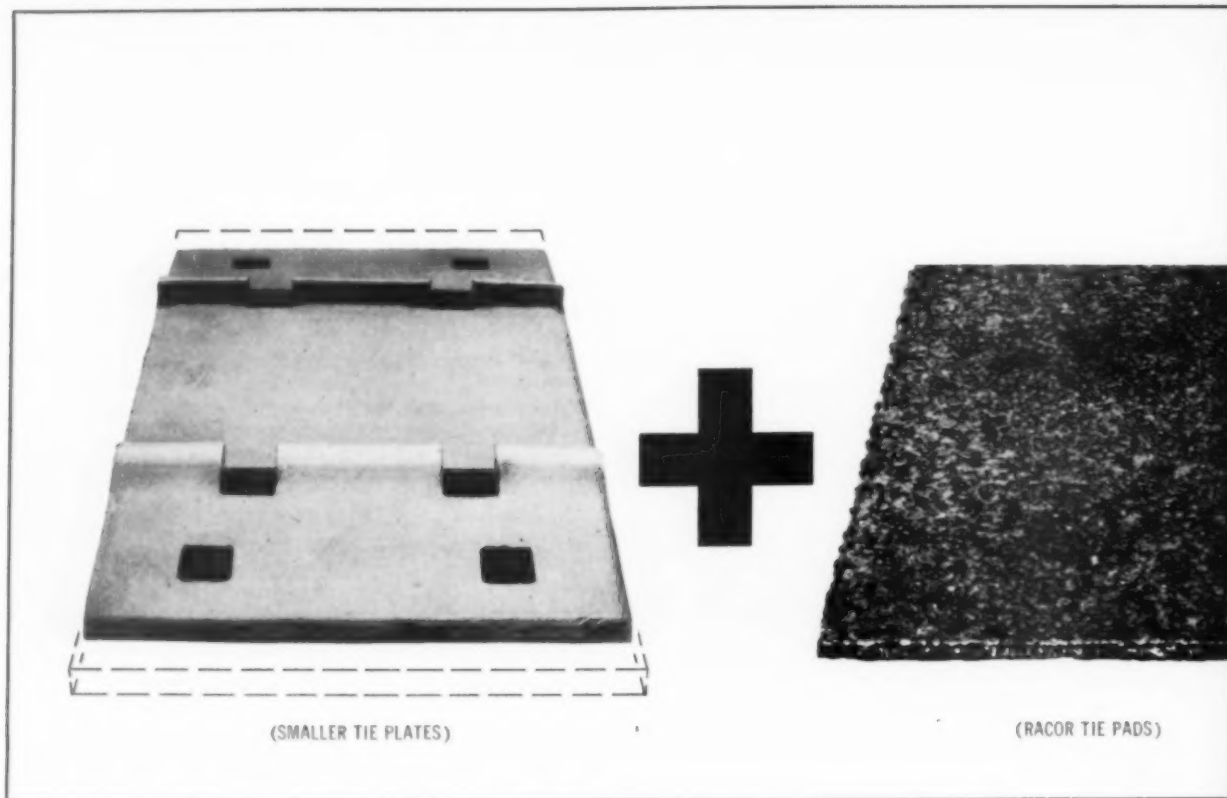
When a wreck occurs the road involved may not own or have at hand all the off-track equipment needed to handle the situation. In that event, it is common practice to rent from contractors such equipment as may be needed, including bulldozers, flat-bed trailers for hauling them, truck cranes and other units. Frequently the rental arrangement includes the operators. To assure that arrangements for such rentals can be made quickly following a derailment, the practice is to provide key officers with lists of local contractors, including their addresses and telephone numbers.

There are other types of equipment helping railroads to minimize traffic interruptions caused by derailments. Modern communications, such as portable radios and public address systems, are doing their part in helping to coordinate the operations. Portable generators, compressors and pumps are always handy to have around. And when the track-rebuilding stage has been reached, the various types of track-working machinery in common use today will help finish the job in short order.

SHUT OFF ALL CALLS

Railway Age for Sept. 21 carries a twelve-page message of vital importance to the railroad industry from Alcoa. ▼ Aluminum Company of America





Here's how you can save \$1,320 or more on every mile of track re-laid

Are you short of funds for M/W upgrading? If your present rail relaying plans call for larger tie plates, we urge you to seriously consider using your *present* plates with Racor® tie pads. You will get far better tie protection, and you will save money, too. New large quantity discounts on top-quality Racor tie pads now make out-of-face installations economically sound. The accompanying table shows how big some of these savings can be!

Do you have usable tie plates on hand? If you have a stock of smaller tie plates which you have "outgrown", you can upgrade them by several sizes through the use of Racor tie pads.

As the A.R.E.A. test at London, Kentucky, shows, small tie plates *plus* proper tie pad protection equal longer tie life, elimination of plate cutting, and far lower track maintenance costs. Experience indicates that a reduction of one, two or even three inches in plate size may be practical under many conditions. Thus it is often possible to effect very substantial savings while realizing

the many benefits of Racor tie pad protection.

Do you want to reduce future M/W expenses? The new low quantity prices on Racor tie pads now make out-of-face installation of tie pads economically feasible in a great many heavy traffic main line locations. In an effort to reduce plate cutting and the resulting higher costs for maintaining main line track in top condition, many roads are considering larger or heavier tie plates. By providing better tie protection and lower maintenance requirements, Racor tie pads at their new low prices provide a more economical alternative.

To help you take full advantage of these new quantity prices on Racor tie pads, your American Brake Shoe representative will be glad to go over your situation with you and prepare a comprehensive cost analysis for your evaluation. For full details consult American Brake Shoe Company, Railroad Products Division, 530 Fifth Avenue, New York 36, New York.



(IMPORTANT INITIAL SAVINGS)

TYPICAL EXAMPLES OF SAVINGS, DOLLARS PER MILE*

WITH 115 POUND RAIL:

USING THIS SIZE TIE PLATE AND RACOR TIE PAD	INSTEAD OF THIS SIZE TIE PLATE ALONE	SAVES YOU THIS MUCH PER MILE
▼	▼	▼
No. 4 11" Light	No. 7 13" Heavy	\$1,320
No. 4 11" Light	No. 8 14" Ex. Hvy.	2,795
No. 4 11" Light	No. 20 15" Heavy	4,795
No. 6 12" Medium	No. 7 13" Heavy	40
No. 6 12" Medium	No. 8 14" Ex. Hvy.	1,510
No. 6 12" Medium	No. 20 15" Heavy	3,490
No. 7 13" Heavy	No. 20 15" Heavy	1,793
No. 8 14" Ex. Hvy.	No. 20 15" Heavy	193

WITH 132 OR 133 POUND RAIL:

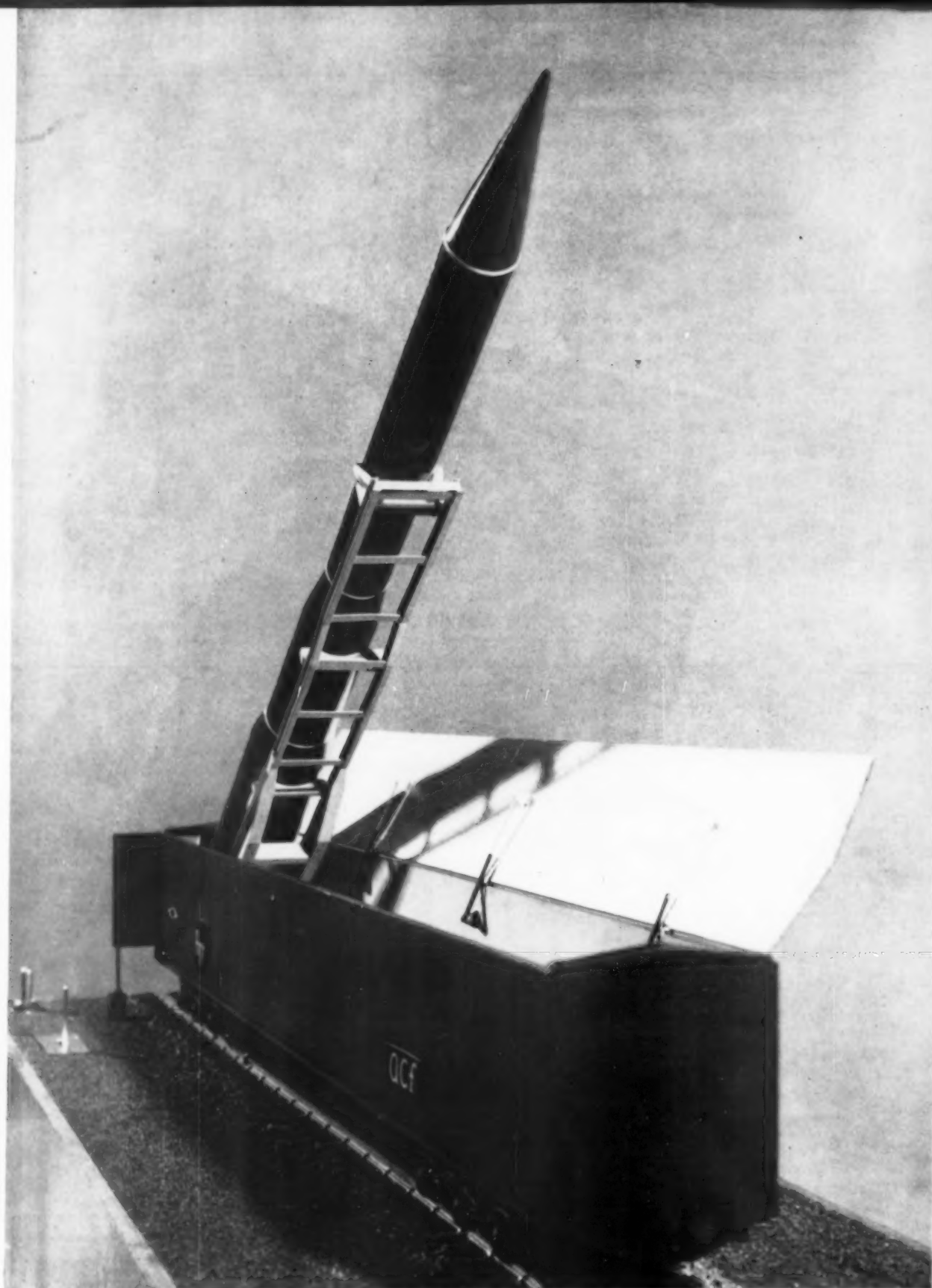
USING THIS SIZE TIE PLATE AND RACOR TIE PAD	INSTEAD OF THIS SIZE TIE PLATE ALONE	SAVES YOU THIS MUCH PER MILE
▼	▼	▼
No. 9 12" Light	No. 12 14" Heavy	\$1,360
No. 9 12" Light	No. 13 14 1/4" Ex. Hvy.	2,260
No. 9 12" Light	No. 21 16" Heavy	4,965
No. 10 13" Medium	No. 13 14 1/4" Ex. Hvy.	843
No. 10 13" Medium	No. 21 16" Heavy	3,543
No. 11 13" Medium	No. 13 14 1/4" Ex. Hvy.	593
No. 11 13" Medium	No. 21 16" Heavy	3,293
No. 12 14" Heavy	No. 21 16" Heavy	1,813

*Tie pad prices based on quantities required for ten miles of track. Tie plate prices F.O.B. mill for 7 1/4" sizes.



Quality products cut your ton-mile costs





ICBM LAUNCHERS, concealed in railroad cars until firing orders are received, are shown in an operating model.



AT THE FIRING POINT, the missile car would be cut off and the rest of the train pulled clear.



AMERICAN CAR & FOUNDRY DIV. President H. H. Rogge (left) shows car to C. L. Burgess and J. F. Clark.

Missiles Fire From Railroad

A missile defense system using railroad cars as launching platforms has been proposed by ACF Industries and American Machine & Foundry. Like a similar proposal submitted to the Defense Dept. by Bethlehem Steel Co. and Paul Hardeman, Inc. (RA, July 6, p. 36), the ACF-AMF plan would make it impossible for an enemy to know in advance the sites from which defense missiles might be fired.

In a joint statement from J. F. Clark, president of ACF, and Carter Burgess, AMF president, the following advantages of a mobile missile-launching system using railroad lines were stressed:

- Railroad launching provides effective dispersion of bases. Missiles could be launched from railroad cars from almost any point in the 218,500 route miles of the American railroad system. This would make it almost impossible for an enemy to wipe out our defenses in a sneak attack.

- Techniques now in use for launching missiles, combined with conventional railroad operating procedures, would make it possible for the system to be operational as soon as equipment is ready.

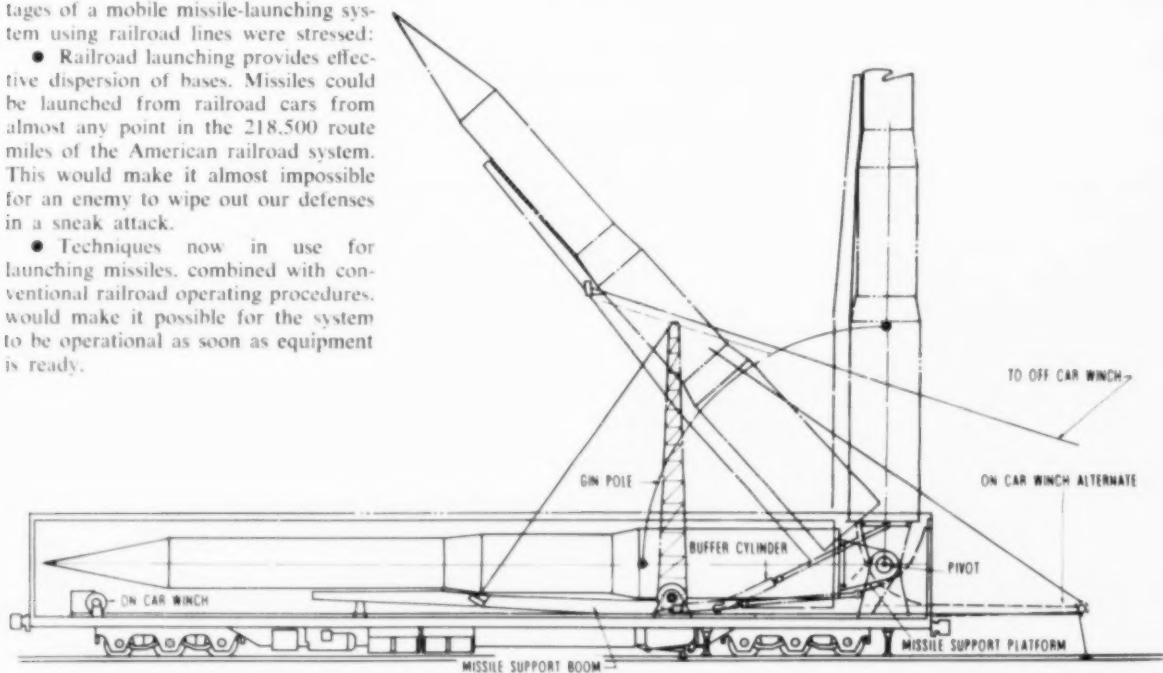
- Rapid changes in the launching pattern could be made simply by changing the routes selected.

The ACF-AMF system was disclosed at the Air Force Association's 1959 "Aerospace Panorama" in Miami Beach, Fla. A model of the railroad car from which missiles might be launched was demonstrated at the convention.

The essential parts of the launcher are a missile support boom and platform, pivoted at a trunnion located 10

feet above floor level, and a "gin pole," which is pivoted approximately 20 feet from the trunnion, as shown in the diagram below.

The gin pole carries the cable as it elevates. The cable is attached to the boom, approximately 40 feet from the trunnion. The winch used to raise the missile may be either in the car or outside. If the winch is in the launcher car, a second gin pole is required, extending horizontally out of the rear end of the car at floor level.



MISSILE FIRING POSITION is achieved by a combination of a support boom, gin pole, and winch operated cables.

RRs Decry Union 'Distortions'

► **The Story at a Glance:** Top management and union spokesmen traded sharp verbal blows last week on featherbedding. Neither side showed signs of weakening.

A challenge went out from AAR President Daniel P. Loomis to union leaders: "If, as you contend, there are no wasteful work rules in our industry, why do you . . . refuse to throw the facts open to examination by the public?"

RLEA Chairman G. E. Leighty answered with a familiar refrain: "If the railroad managements persist in their present course of trying to provoke a strike, I assure them they will have one."

Does the management-computed cost of featherbedding on the railroads—\$500 million a year—include pay for vacations, holidays and sick leaves? Union leaders have told the public that it does. Last week, management's leading spokesman sought to correct the unions' "distortions of facts" and "put the record irrevocably straight."

"Let me state to you now," said AAR President Loomis in a letter to G. E. Leighty, chairman of the Railway Labor Executives' Association,

"that the \$500 million annual cost to the public for work paid for but not needed or not performed is not 'pulled out of thin air or gerrymandered from Interstate Commerce Commission figures,' as your publicity has stated so frequently.

"Rather, our estimates are detailed dollars-and-cents compilations based on actual operating practices out on the railroad right-of-way, in passenger terminals, in freight yards and at industrial sidings and wherever else trains run and train operating crews work.

"Our studies, carried out in exhaustive detail over a period of many months, show precise areas where unnecessary positions are being staffed, where excessive and unjustifiable wages are being drawn and where needless duplication of work and pay exists. Our figures have no relationship to the ICC classification of time paid for but not worked nor is there the slightest question about inclusion of vacation or holiday payments. These are not included."

Mr. Loomis reiterated management's offer to make its featherbedding studies available "at the proper time to a properly constituted public body set up to help both parties find effective

ways to wipe out this indefensible waste."

And he renewed his invitation to the union leaders to cooperate with management in obtaining "an objective and impartial study of the problem by a special Presidential commission."

There was little indication that Mr. Loomis' remarks fell on receptive ears. His letter was dated Sept. 8. On the same day, Mr. Leighty, in a speech before the international convention of the Brotherhood of Sleeping Car Porters, was accusing management of deliberately trying to provoke a strike.

"I tell railroad management here and now . . . that railroad workers are ready for a strike if it is forced upon them—indeed, many of them would welcome it, seeing in it a chance to get back at railroad management for the grievous wrongs it has done its workers in recent years," he said.

He added that he did not share the latter view, "because I believe that all strikes represent an economic loss of some kind for the workers and for the nation, as well as for the employers involved.

"I regard the strike as labor's weapon of last resort," said Mr. Leighty, "and I know all responsible leaders of railway labor do likewise. Nevertheless, railroad labor throughout its history has never been so lacking in dignity that it is afraid to strike to attain just ends when all other means have failed."

Mr. Leighty denounced the railroads' service-interruption insurance plan, and declared that it "will not prevent a strike, nor will it adequately protect the railroads from the consequence of such a strike."

Elsewhere, the RLEA Chairman:

- Accused management of "lack of good faith" on the job stabilization issue. He said that "for two years, railroad lawyers successfully dragged through complex legal machinery their refusal to bargain in stabilization of employment on the specious grounds that the moratorium prevented it, even though they had agreed to exempt this movement from the moratorium provisions and the agreement specifically said so."

- Said management's "blindness and stubbornness" had prevented the creation of a joint labor-management committee on railroad safety.

- Asserted that "all the evidence indicates that many railroad managements have adopted a deliberate policy to kill railroad passenger service as soon as possible."

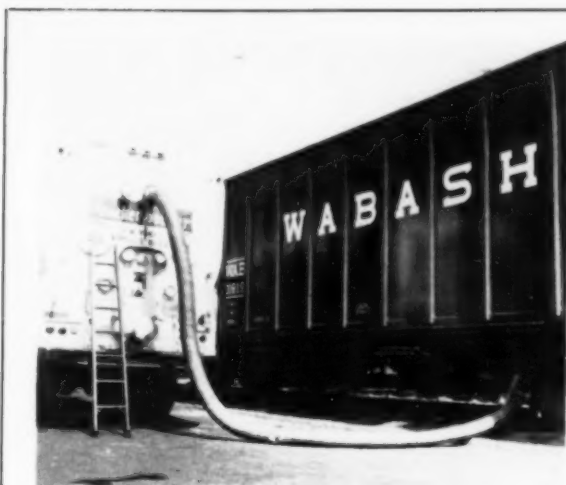
Conventions, Exhibits Open in Chicago

Railroad supply company officers will crowd into Chicago this week and next to attend annual meetings of six major railroad associations.

Quite a show is in store. Record attendance is expected, brought on in part by the big exhibits set up by the Association of Track & Structure Suppliers (Sept. 14-17) and the Allied Railway Supply Association (Sept. 20-23).

The Roadmasters' and Maintenance of Way Association, and the American Railway Bridge & Building Association will be meeting at the Conrad Hilton Hotel this week. A total of 112 exhibitors will have the latest in equipment on display at the Coliseum, beginning at 9 a.m. Sept. 14.

The Coordinated Mechanical Associations move into town next week for meetings beginning Monday at 10 a.m. Products and equipment of 131 exhibitors will be shown, beginning at noon on Sept. 20, in the Exhibit Halls of the Hotel Sherman. A few blocks away, on open tracks near Illinois Central's suburban station, 21 companies will display freight cars and other new equipment. Shuttle buses will operate between the Sherman and the track area. All the exhibits will remain open through Wednesday, Sept. 23. One exhibitor, ACF, will offer "water taxi" service via express cruiser between a landing near the convention hotel and the track show.



'Ship-O-Matic' Car to Be Shown at Chicago Track Exhibit

ACF's American Car & Foundry Division plans to demonstrate its new "Ship-O-Matic" car for pneumatic unloading of dry cargo at the Allied Railway Supply Assn. show in Chicago Sept. 20-23. The actual unloading operation using the car's pneumatic outlets will be demonstrated at the show. In the photo above, a "Ship-O-Matic" car recently built for the Wabash is about to unload malt.

Hooking up the pneumatic unloader can be accomplished by one man in a matter of seconds, says the ACF division's Vice President C. F. Venrick. Three steps complete the operation: unscrewing unloading cap, opening air inlet, and inserting suction hose as shown above. Available in a 2,000-cu ft twin hopper, or 2,900-, 3,200- and 3,500-cu ft triple hoppers, cars can be gravity-unloaded.

Pullman to Lease Freight Cars

Pullman, Inc., is extending its interests in the transportation equipment field to include service leasing of special types of freight cars. A new subsidiary, Transport Leasing Co., has been formed to handle Pullman's leasing activities.

First cars in the new TLCX fleet are 100 85-ft piggyback flat cars, built by Pullman-Standard and rented to freight forwarders and other users for operation primarily between Chicago and the Pacific Coast. An additional 150 TOFC flat cars will be built for the leasing subsidiary as steel becomes available.

Champ Carry, president of Pullman, Inc., noted that the railroads "clearly have entered a period of rapid advancement in the art of moving freight. Our Pullman-Standard Division is contributing to this progress through the development and production of new and improved types of cars. Our subsidiary, Trailmobile Inc., has become a leading supplier of truck trailers and demountable bodies for coordinated rail-highway use.

"In the light of these trends, together with the furnishing of some of the newest types of railroad equipment by shippers under special tariff arrangements, we have decided to establish a service leasing program with full re-

sponsibility for financing, maintenance and other phases of ownership.

"While we are optimistic as to the long-range potentialities of the new leasing activity, it is 'starting from scratch' and is not likely to weigh heavily in our total operations for some time to come."

John W. Scallan, president of Pull-

man-Standard, and Arthur L. Berry, assistant to the president of Pullman, Inc., have been elected chairman and president, respectively, of Transport Leasing Co.

First industry showing of TLCX PS-4PB equipment will come at the Allied Railway Supply Association's Track Exhibit Sept. 20-23 in Chicago.

Oil Agreed Charge Broadened

What is probably the broadest agreed charge yet signed by Canadian railways is scheduled to go into effect Sept. 15, to cover movement of petroleum products from points in Alberta, British Columbia, Manitoba, Ontario and Saskatchewan to points in Alberta, Manitoba, Ontario and British Columbia.

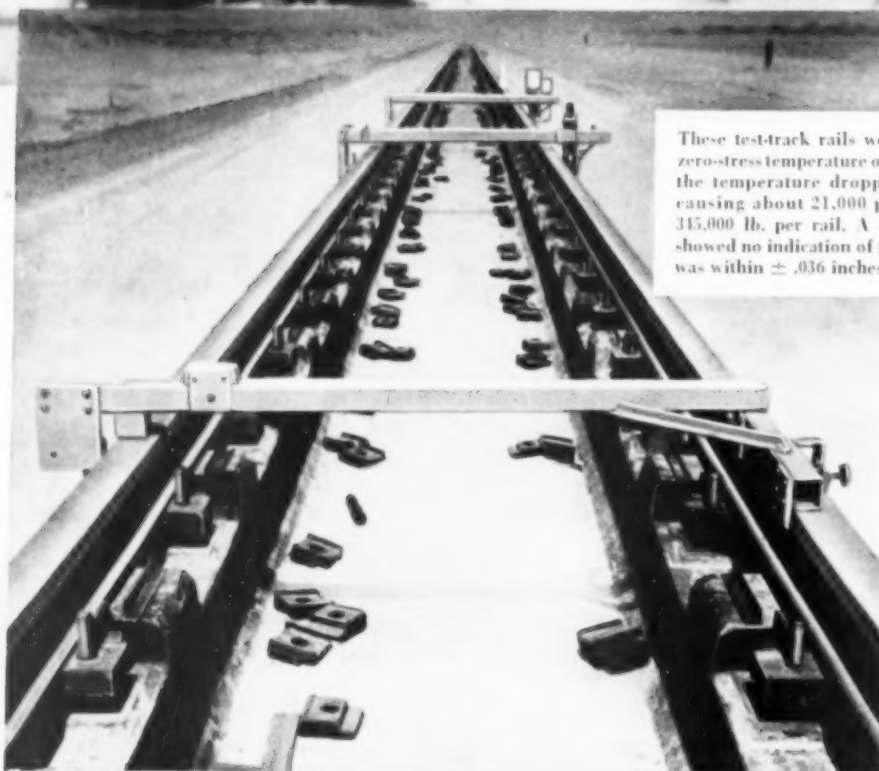
The 30-page agreement, designated AC No. 761, will replace about 10 earlier agreed charges. Generally, it provides lower rates per mile (on highway mileage basis) to offset increased carrying capacities of tank trucks which compete with the railways for the affected traffic.

Shipper opinion—which has heretofore been almost solidly in favor of agreed charges—is reportedly divided on No. 761. One group believes it to

be sound, offering lower rates in accord with current competition, and consolidating tariffs to eliminate a number of alleged distortions and present a uniform rate pattern. The other group feels the new agreement covers too large a territory; that marketing problems faced by different shippers vary too much to be met by such a tariff, and that agreed charges should be used primarily for specific movements rather than for broad areas.

The first group includes Federated Cooperatives, Imperial Oil, North Star Oil, and Texaco Canada, all of which have signed the new charge. Other oil companies, though participants in other agreed charges, have not yet signed No. 761; some have indicated an intention to return to highway movement.

"RIBBONRAIL" WELDS... **WHERE QUALITY IS A MUST**



These test-track rails were installed for a zero-stress temperature of 115°F. One night, the temperature dropped to 10° above, causing about 21,000 psi in tension, or 345,000 lb. per rail. A careful inspection showed no indication of failure. Alignment was within $\pm .036$ inches.



2,450 ft./sec. without a failure!

At Edwards Air Force Base, a test vehicle will be able to slide over these rails at four times the speed of sound — Mach IV. They're designed to take downloads up to 100,000 pounds at 2900 ft. sec. Every joint was welded perfectly by RIBBONRAIL Service. No rejects.

This is 171-lb. special rolled crane rail with a cross-section of 17 sq. in., laid on continuous reinforced concrete beams. But it was joined by the identical LINDE RIBBONRAIL Process that would be used on your own tracks—oxyacetylene pressure welding.

Here's how quick, simple, and economical RIBBONRAIL Service is. First, rail ends are butted together, given a single cut with a rail saw, inspected for flaws, cleaned, and deburred. Hydraulically forced together at 2500 psi., and heated to 2250° F. by a special welding head, they fuse to form a joint. Average time is five minutes for 115-lb. rail.

Then all joints are "normalized"—heated to 1500° F. by an oscillating head similar to the welding head. This improves the weld, relieves internal stresses, makes failure far less likely under repeated strain.

For substantially lower costs than jointed rail, you can enjoy similar advantages with RIBBONRAIL Service. And that includes *all* costs—for materials and labor from storage pier to flat car. In 20 years, more than 40 major railroads have adopted LINDE's RIBBONRAIL Service. Call your nearby LINDE representative, or write Railroad Department, Linde Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N.Y. In Canada: Linde Company, Division of Union Carbide Canada Limited.

RAILROAD DEPARTMENT

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HAS **EVERYTHING** YOU NEED
FOR SYSTEM-WIDE
COMMUNICATIONS

Microtel Microwave equipment, for instance...

Lenkurt *Microtel* provides maximum channel capacity per dollar, plus high-quality transmission... allows more protection against fading.

For instance, with Lenkurt 45BX Carrier, a single 6000-mc *Microtel* unit can accommodate from 4 to 264 voice channels. Channels may be dropped or inserted at any point.

Lenkurt *Microtel* has the additional advantage of being economical in operation. Power consumption is less than 300 watts. An advanced type of automatic frequency control dispenses with the need of crystal ovens or blowers. With

the use of r-f circulators, 2, 3, or 4 *Microtel* terminals may be operated on a single antenna system.

Whether your expansion program calls for carrier, microwave, data transmission or supervisory control, AE-Lenkurt has the equipment, *plus* the engineering teams and talent to handle the project from start to finish. And AE-Lenkurt services are tailor-made to your requirements.

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185 Bartley Dr., Toronto 16, Ontario*

RRs HAIL PAINT CASE VICTORY (Continued from page 10)

sion which would make clear a Commission view that the shipping public is entitled to benefits of carrier competition.

Rejecting trucker contentions that the railroad cost evidence was inaccurate to the point of making it unreliable, the Commission also rejected contentions that rates on paint "should return full costs plus a profit." The Commission noted that the truckers undertook to support this position by citing *Demountable Motor Truck Bodies, Loaded or Empty*, wherein Division 2 has condemned railroad rates because they fail to meet that test (RA, Nov. 17, 1958, p. 10). Pointing out that it has reopened that case for further hearing, the Commission went on to say:

"Furthermore, we do not agree with protestants' contention. In numerous proceedings involving competitive situ-

ations we have approved rates which, as here, covered the out-of-pocket costs and made some contribution to the fully distributed costs."

It was to the reference to the *Demountable Truck Bodies Case* that Commissioner Murphy objected. He felt that it leaves an "implication" that that case "rests on all fours with the instant proceeding."

The majority also cited *New Automobiles in Interstate Commerce*, 259 ICC 475, where the Commission said "a reasonably compensatory rate is one which is remunerative, i.e., covers the out-of-pocket costs . . . including a proper return on investment"; and *Petroleum Haulers of New England, Inc., v. Boston & M. R.*, 269 ICC 6, where the Commission "rejected complainant's contention that the rates therein which did not cover fully distributed costs were less than reasonable rates."

Section 15a(3) was enacted primarily to affirm the policy laid down by the Commission in the *New Automobiles case*. The railroads contended that this Congressional action "was due solely to our failure to follow that policy in some later proceedings," the Commission said. It went on to quote pertinent excerpts from the *New Automobiles report*. It then led into its favorable finding with this comment:

"The principal difference in the views of the parties with respect to Section 15a(3) appears to be in the construction that should be placed upon the prohibition in the national transportation policy against unfair or destructive competitive practices . . . The protestants say that the motor carriers are capable of reducing their rates, and will do so where they think it is to their advantage, and that as this proposed adjustment is in no way related to the competitive situation facing the railroads, and is much lower than necessary in spots, it constitutes and can only result in destructive competitive practices."

"The respondents assert that reduced rates to be unfair or destructive must be so in fact and in law. They admit that their intention is to attract some of the traffic now transported by the motor carriers, but they urge that the proposed rates cannot be found to constitute an unfair or destructive competitive practice merely because they may divert traffic from another mode of transportation . . ."

"Competition between carriers comprehends both rates and service. The record indicates that, because of service advantages, the motor carriers may be able to continue to compete for this traffic without any reduction in their

rates. Whether this is so or not, there is no indication that the proposed rates will have an adverse effect upon the protestants in such manner as to constitute an unlawful practice."

Favorable reaction to the eastern roads' victory was not confined to the East.

Clair M. Roddewig, president of the Association of Western Railroads, called the decision "most encouraging. If this means, as I hope it does, that the Transportation Act of 1958 has restored the railroads to a place in the competitive economy of our country, it could be the beginning of a new era for the railroad industry."

Mr. Roddewig said the Paint Case victory "could mean, among other things, that the railroads will not be barred any longer by regulatory policies from establishing rates that will prove sufficiently attractive to shippers to induce many of them to give up private trucking and return to rail transportation."

J. R. Sullivan, vice president—traffic of the Minneapolis & St. Louis, said the ICC decision would be "most helpful to the railroads in many similar instances designed to recapture traffic lost to competitive forms of transportation." Malcolm Roper, Western Pacific vice president—marketing, agreed that the decision could be helpful to the industry as a whole—provided the ICC would be consistent in subsequent cases.

Ross L. Thorfinnson, Soo Line vice president—traffic, said the Commission's decision "gave recognition to the need for new types of incentive rates as a means of meeting the serious competitive threat facing the railroad industry today."

Conciliation Board Recommends Pay Hike

Trainmen in Canadian Pacific's Eastern Region would receive wage increases totaling about 10% in four stages if CP and the BRT agree to the recommendations of a Conciliation Board.

Terms of the proposed three-year agreement call for three retroactive increases, dating to June 1, 1958; Feb. 1, 1959; and Sept. 1, 1959. The fourth-stage increase (1.5%) would be effective June 1, 1960.

The Conciliation Board recommendation, not binding on either side, follows generally the pattern of wage settlement reached last year with the non-operating employees.

Still pending are recommendations on wage demands made by the Trainmen covering CP's Prairie and Pacific Regions.

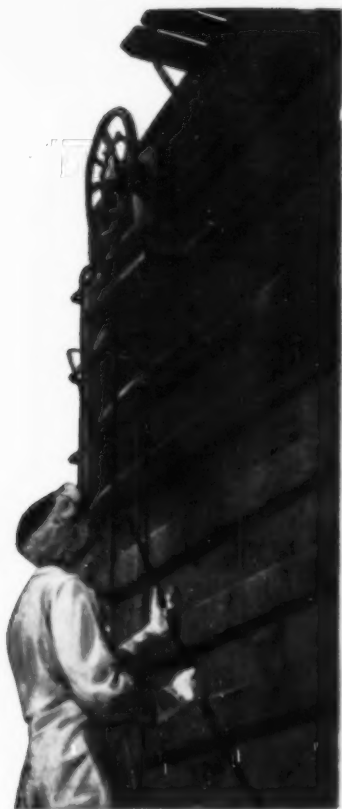
As the Publisher Sees It . . .

The Interstate Commerce Commission's long-awaited decision on the railroads' Paint Case has been reached. That the ruling favors the railroads is a real victory for the industry, the shippers and the public. It is also, by the way, a personal victory for Jim Lyne, editor of *Railway Age*, and for the team of rate researchers he chairs at the Traffic Executive Association—Eastern Railroads.

It is now past history that the railroads lost a full year in getting this favorable decision. It is current history that one of the most important provisions of the Transportation Act of 1958 has now been clarified and its provisions made available to the industry. The rosy future is that the railroads should now be in a position to go after profitable traffic without too much regulatory concern about the effect on motor truck or waterway competition.

The easing of regulation will enable the railroads to pass on to the American people one of the inherent advantages of railroads—low cost "wholesale" transportation. One of the first truly counter-inflationary moves of the present decade!





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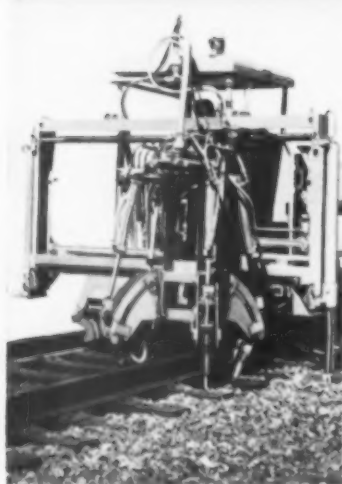


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IN TRACK MAINTENANCE ...

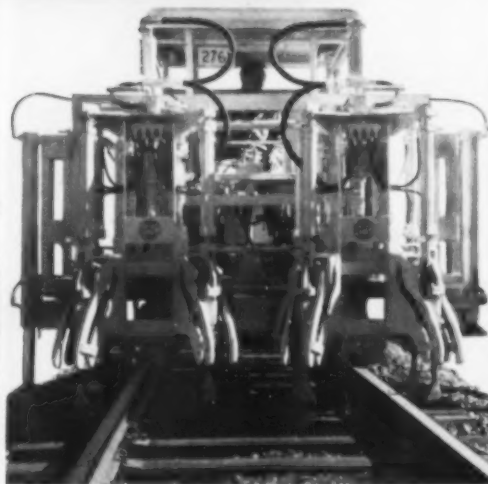
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by **RMC** **MACHINES**

*** TIE TAMPING**



McWILLIAMS SPOT TAMPER

Big-tamper ballast compaction for smoothing, spot surfacing, yard and terminal maintenance.



McWILLIAMS MULTI-PURPOSE 8

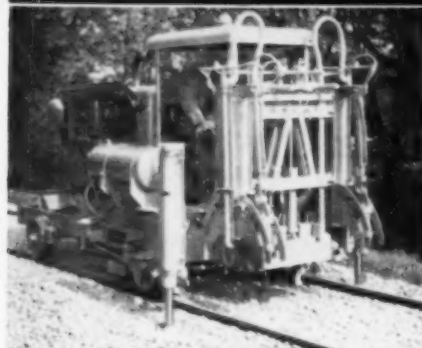
This is the world's most versatile tamper — a production tamper, a spot tamper, a jack tamper.



McWILLIAMS PRODUCTION TAMPER

Will finish tamp any raise up to 6" at speeds up to 720' per hour.

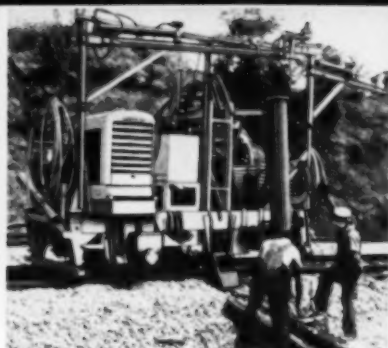
* JACK TAMPING



R. M. C. JACK TAMPER

Only machine that will raise and tamp track . . . and hold established grade, keeping ahead of one or two production tampers.

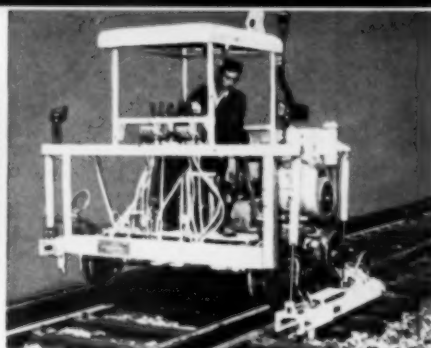
* TIE REPLACING



R.M.C. TIEMASTER

Replaces ties at a rate of approximately one per minute with three men, with minimum track disturbance.

* TIE SPACING



R.M.C. TIE SPACER

Corrects poor tie spacing and slewed tie conditions by means of two hydraulic shifting devices.

* DISTRIBUTING BALLAST



McWILLIAMS BALLAST DISTRIBUTOR

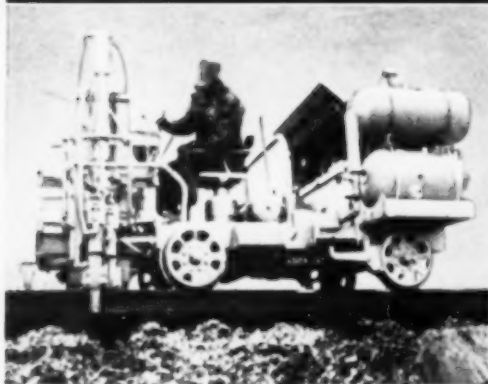
Places ballast in desired quantity in exactly the proper position for tamping, shaping shoulder and inner-track space.

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Cleans or excavates shoulder ballast at speeds up to 2400' per hour.



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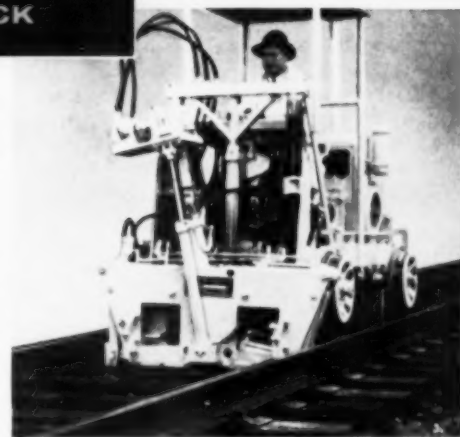


R.M.C. SPIKEMASTER

Nips up the tie and drives four spikes, one on each side of both rails. Speed: better than six ties per minute.

R.M.C. LINEMASTER

Lines over 6000 feet of track per day, using an operator and one man sighting. Wheel-mounted and crawler mounted models.



Railway Maintenance Corporation

PITTSBURGH 30, PA.



TRACTOR OPERATOR in the Huntington shop area can be reached immediately by C&O's T&T dispatcher via radio.



STORES DEPARTMENT uses Bendix Aviation's 1P71C mobile two-way FM radio units.



Radio Cuts Stores Dept. Costs

Chesapeake & Ohio has turned to radio communication to boost the efficiency of its system stores operation at Huntington, W. Va.

C&O invested about \$10,000 in setting up its radio network. Now, with the system in full operation for about eight months, the verdict is in.

Radio's performance, C&O's stores department reports, "has exceeded our original expectations."

Dividends are mainly in the area of reducing waste motion and repetitive or overlapping assignments. With three base stations and nine stores vehicles radio equipped, it's a simple matter for the truck-and-tractor dispatcher to reach his operators anywhere in C&O's sprawling Huntington shop layout.

Under the pre-radio method of operation, a tractor operator might be sent to the far end of the area to fill an assignment. Another job in the same area might crop up while he was en route. But the dispatcher couldn't pass along the new assignment until the operator had completed the first job and returned to the dispatcher's office.

With radio, the waste motion is

eliminated, assignments are completed without delay, wear and tear on equipment is reduced.

Base stations are in the stores delivery office, the back shop and the Section A office at the east end of the shop area.

A fourth fixed installation, at the general foreman's office, handles only communication with a radio-equipped highway truck.

Included in the nine radio-equipped vehicles are flat-bottom trucks, gasoline and electric tractors, an electric high-low lift truck and a crane lift. A set has also been installed in a 25-ton rail-mounted diesel locomotive crane.

Base stations are equipped with fixed antennae, roof- or wall-mounted. Mobile units use 18-in. whip antennae. Base stations operate from ac, mobile stations from a 6-volt battery power supply.

Reception hasn't been a problem. C&O figured its equipment should have an effective radius of about six miles—but the base station and the highway truck have been in radio contact over distances of up to 20 miles.

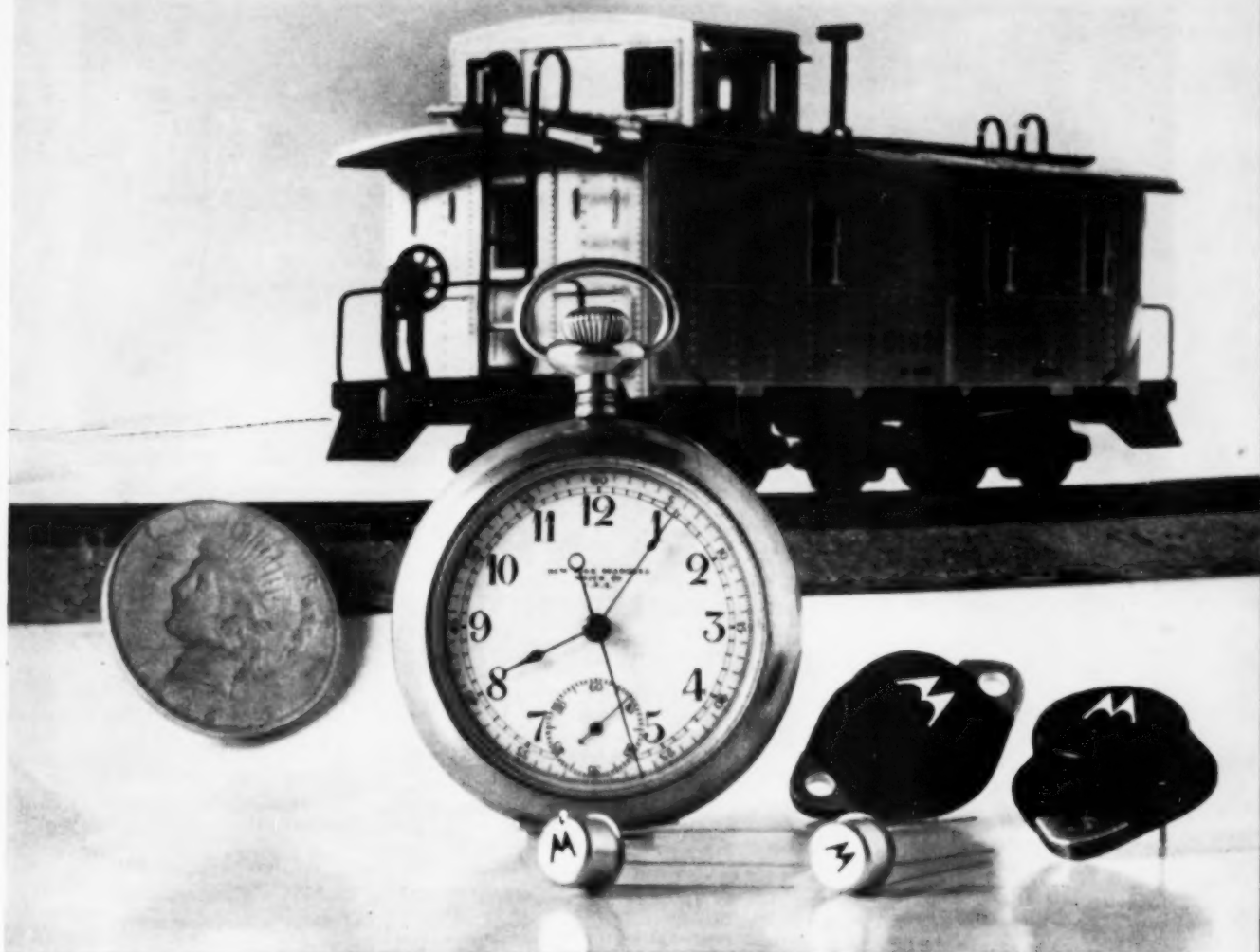
Maintenance, likewise, hasn't been troublesome. The sets are protected by heavy steel outer cases cushion-mounted on the equipment. Stores vehicles have been known to take a good bouncing (when moving over planked rail grade crossings, for example), but C&O has found that "it takes a pretty good jolt to give us trouble."

The road handles its own radio maintenance.

Provision of spare sets frequently makes a unit exchange possible when repairs are necessary.

Huntington is the only stores point where C&O has installed radio. Other large storehouses are at Russell, Ky., and Grand Rapids, Mich., but both are smaller than the extensive system operation at Huntington.

"We put in radio to save us time and money, to cut down on the inefficiency of having an operator going one way loaded, one way empty when there's a good chance he could have a load both ways," General Foreman C. A. Rice explains. "And it's certainly made it possible for us to do what we set out to do."



new **TIME** and **MONEY** savings with **TRANSISTOR RELIABILITY...**

NEW MOTRAC® 2-WAY RADIO PRACTICALLY ELIMINATES MAINTENANCE!



Motorola MOTRAC railroad radio conforms to AAR standards for caboose applications operating from 12-volt dc primary power supply. 25 watts RF output—152-174 mc operation.

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MOTRAC radio is ready NOW—completely field proved to assure you a new time and money saving era of maintenance freedom . . . plus unparalleled Motorola quality performance. Call or write today for complete details.



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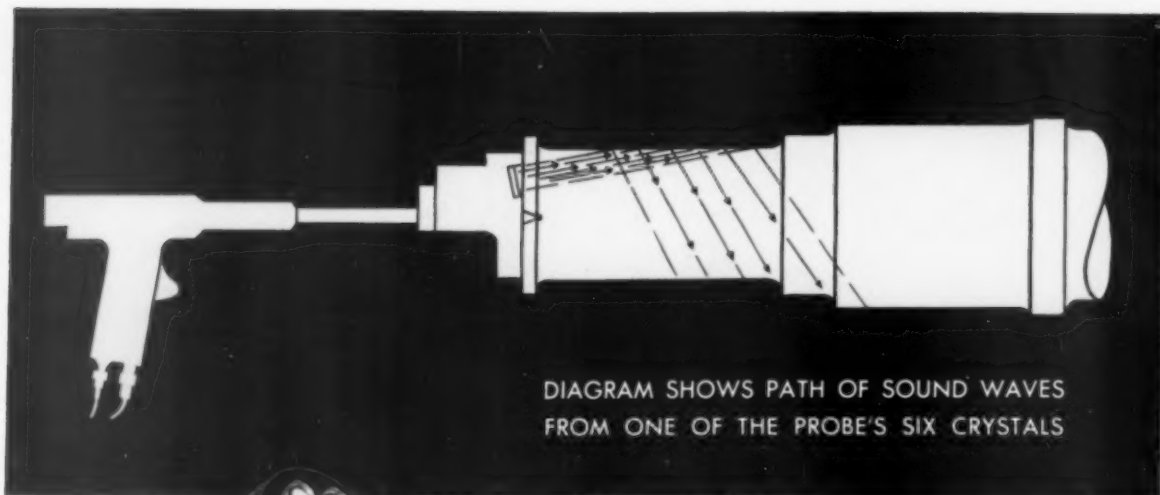


DIAGRAM SHOWS PATH OF SOUND WAVES
FROM ONE OF THE PROBE'S SIX CRYSTALS



ON THE JOB . . . AN UNSKILLED
OPERATOR CAN NOW TEST MORE
AXLES AT FAR LESS COST!

Ask for demonstration . . . make a
comparison test. Write for descriptive
literature.

THE NEW Sperry Journal Test Car Designed For Accurate Detection Of Progressive Defects

The new improved Journal Test Car brings increased testing speeds with greater accuracy. Only Sperry's complete mobile unit, utilizing the exclusive angle beam technique, inspects the most critical areas of axles generally left undetected by other methods. It has "Go-no-go" simplicity. Harmless structural differences inherent in many axles are not misinterpreted as progressive cracks, thereby avoiding unnecessary costly dismantling for verification. The ultrasonic search probe has six angle beam crystals, with replaceable plastic faces. An electromagnet insures uniform search unit contact. A green light signals when the electromagnet is on. Red light and alarm buzzer signals when a progressive fracture is located. Simple as that! No complicated controls to adjust! Works equally well on all diameter freight car axles. Three wheel car has heavy duty fiberglass body, automatic transmission and rugged air-cooled engine. New Ultrasonic Reflectoscope is battery operated from a transistorized power supply.

See equipment on display in
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JOURNAL TEST CAR

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'Hidden' Costs Can Be Reduced

P&S Division committee points out eight easy-to-overlook areas where significant reductions in expenses can be made. Although based on stores department procedures, many of the committee's conclusions seem applicable to other railroad departments. Fundamental to the committee's study was the relationship between dollar volume of purchases and the man-hours spent weekly in performing associated routine procedures.

A recent study by a committee of the AAR's Purchases & Stores Division suggests that many railroads may be missing chances for significant cost reductions in as many as eight easy-to-overlook areas.

Some conclusions reached by the division's Committee on Purchasing Department Procedures appear applicable to other departments of a railroad as well. In every office, such routine matters as correspondence, typing, filing and mailing eat up costly man-hours. The question is, how much is too much?

What the P&S group set out to study was the relationship between dollar volume of purchases and the man-hours spent weekly in performing associated routine procedures.

As might be expected, the committee found that man-hours increase as dollar volume increases. The sharpest rise generally occurs, however, at the bottom of the scale. In other words, it takes more man-hours, proportionally, when purchasing volume goes from \$3 million to \$4 million, than when it increases from \$30 to \$40 million.

This, of course, is only a general trend. The committee found wide variations among the 32 roads surveyed—even among those in the same bracket of annual purchasing volume.

One of the 32 roads, for instance, revealed that it uses about 3,500 man-hours weekly to handle \$60 to \$80 million a year in purchases. Another, with very nearly the same volume, uses only 2,200 man-hours. Wider use of mechanized procedures, of course, account for much of the difference.

Here are eight specific areas which the committee studied:

- **Supervision** varies widely from road to road. One road devotes roughly 110 man-hours a week to this function, even though its purchases are only slightly over the \$2 million figure. Another road, with a purchase volume of close to \$50 million, puts less than 70 hours weekly on departmental super-

visory functions. Of the two roads in the \$60-\$80-million bracket cited in the second preceding paragraph, one spends nearly 450 man-hours each week on supervision; the other, 140.

- **Processing** requisitions and issuing purchase orders consume the greater portion of purchasing department man-hours. In this activity, the committee found some wide divergences in practice—directly attributable to paper-work reduction programs carried out vigorously on some roads and largely ignored on others. One road, for example, reported some 340 man-hours per week spent in processing some \$3½ million in purchases. Another road, spending nearly \$80 million for general materials (excluding fuel, equipment and forest products), reported the same man-hour figure: 340 per week.

A number of reasons can be cited to explain the wide differences. The latter road, for instance, could be using any or all of such time and paper saving methods as local buying without purchase orders (up to an established maximum value); so-called "blanket" ordering; snap-out type order forms; or punched card orders prepared by data processing machines.

- **Inquiry** issuance, and recording prices for materials, also consume a fair portion of a purchasing department's time. In this area, the study disclosed exceptionally wide differences in practice among the 32 reporting roads. One, for example, devotes about 50 man-hours per week to these functions. A second, with a purchase volume approximately 5% of the first, spends nearly 90 man-hours on the same activities each week.

The committee has recommended that all roads study the cost of preparing and mailing inquiries with the goal of eliminating the practice wherever possible—especially on small lots and relatively inexpensive items.

- **Invoices** must be received, re-

corded, checked and vouchered—all time-consuming operations. One road devotes more than 1,300 man-hours per week to this function. Another, with nearly the same dollar volume, gets by with less than 500 man-hours weekly. Here again, it's a case of procedural streamlining; some roads don't check certain invoices. Cycle billing by manufacturers can do much to trim time spent with invoices on all roads; data processing techniques, likewise, can help to alleviate the situation.

- **Interviews** with salesmen vary, too, according to the volume of business done in individual purchasing departments. The committee's study disclosed that one road in the \$10-\$15-million dollar group devotes less than 10 man-hours to interviews weekly. Another road, in the same volume bracket, interviews salesmen for nearly 80 hours each week. Clearly, there are several factors which influence a road's interviewing activities. Among these are the location of the purchasing office and the methods by which purchases are controlled.

- **Correspondence**, the committee observes, takes too much time. While practices have improved considerably since a similar study was made in 1954, there is still a lot of room for further gains. The committee recommends that all roads:

- (1) Write only essential letters. A telephone call or telegram is usually faster and more direct, and in some cases may actually be less expensive.

- (2) Study all phases of each topic to keep the number of letters per file to a minimum.

- (3) Keep letters short and concise, without unnecessary words.

- (4) Eliminate, so far as possible, letters of transmittal, confirmation and acknowledgment.

- (5) Use form letters wherever possible.

- (6) Use copying devices or marginal

(Continued on page 42)

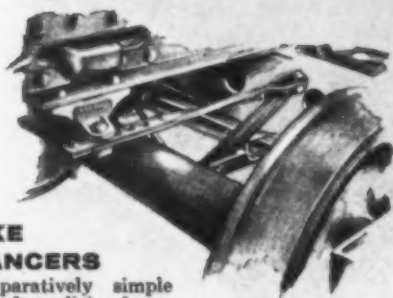
Since 1912

LEADERS IN RAILWAY APPLIANCE PROGRESS

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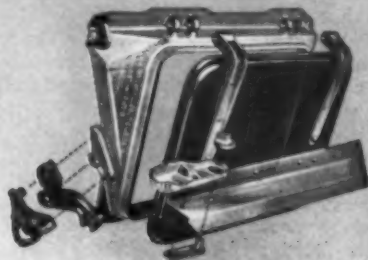
The nation's railroads are noted for many great transportation achievements . . . one of the most important being the efficient handling of the country's heavy bulk freight.

Since 1912, The Wine Railway Appliance Company has designed and manufactured many of the important parts of hopper, gondola, flat and box cars that make this handling function possible, as well as profitable, for the owners and users of the cars. In the years ahead, Wine will continue, through its experience, engineering know-how, and manufacturing skills, to keep pace with the needs of the railway industry.



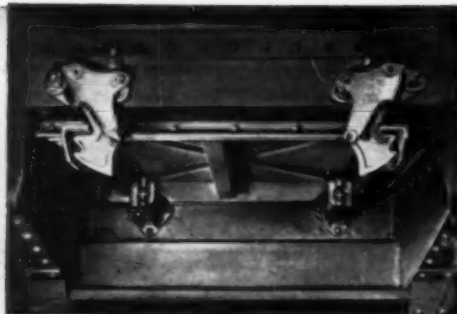
BRAKE BALANCERS

A comparatively simple method of equalizing forces and "balancing" the conventional brake arrangement by replacing the dead lever connection to the truck bolster with the Wine Balancer—connected to the car underframe. A bracket and connector at each end of the center sill flange, engaging the dead lever, balances the brake forces by returning them to the underframe of the car.



CORRELATED HOPPER UNITS

The one-piece, cast steel frame unitises each individual hopper into a structurally sound, functional assembly which assures positive door fit. The adjustable locks, cast steel hinges, and symmetrical tapered door flange make possible the *only* adjustable door fit permitting compensation for wear or common irregularities of construction. "Balanced" unloading is assured by dual door operation and a method of controlled flow.



DROP BOTTOM SPRING HINGES AND ADJUSTABLE LOCKS

Drop Bottom Gondolas equipped with these two Wine products provide the shipper and receiver of the lading with a positive closure and afford a fast, economical one-man operation, with selective single or multiple opening of doors.



CONTINUOUS LADING BAND ANCHOR

Wine's continuous offset bar for top-coping applications provides a secure anchor for lading bands every 7½" of its entire length. Permits the use of all types of banding material.



ADJUSTABLE HOPPER DOOR LOCKS

The adjustment feature allows compensation for construction differences and readily permits adjustments necessitated by wear. Wine Adjustable Hopper Locks are adaptable to built-up, structural hopper openings as well as cast steel frames.



DROP END LOCKS AND END BALANCERS

The complete drop end combination from operating and security standpoints! Interlocked corners provide rigidity to keep the sides from spreading under load. The balancer incorporates the hinge function . . . permits a one-man, time and labor saving closure.



UNIVERSAL LADING BAND ANCHORS

Easily applied on all flat cars and gondolas, the Wine Universal Type Anchor features 360° rotation for tie-ins from any direction. Versatility of use permits welding on coping at important locations as well as mounting in the floor. Drop flush when not in use.

THE
WINE
RAILWAY
APPLIANCE
COMPANY



DIVISION OF
UNITCAST
CORPORATION

TOLEDO 9, OHIO

notations for reply purposes.

• **Mail** is a greater problem on large roads than on small. Variations in amount of time spent in handling purchasing department mail may be partly accounted for by differences in methods of handling. Biggest improvements, however, show up on those roads which have made intensive efforts to reduce their volume of correspondence. One, for example, spends more than 50 man-hours each week in handling purchasing department mail. A second, having nearly identical purchasing vol-

ume, gets by with 10 man-hours.

• **Filing** may be simplified (and space saved) by discarding such things as useless blueprints, pamphlets with lengthy technical descriptions, fancy and bulky covers, binders and unnecessary catalogs, and all correspondence having no future value. In addition, the committee urged that each department determine the cost of keeping various records vs. the potential cost of *not* keeping them—and then act accordingly. Such studies, it was noted, often disclose duplicate records and records

which can be disposed of completely.

As mechanized procedures gain greater and greater acceptance, office procedures can be expected to show steady improvement. To further—and hasten—this result, the committee stressed the need for “selling” employees on the need for simplified methods. In other words, as new methods and equipment come into use, employees should be told *why* the change is made—not just *how* they can handle innovations in the most efficient manner.

Railroading



After Hours with

Jim Lyne

OVERSEAS AIR TRAVEL—I read the other day that the foreign airlines are creeping up on the USA carriers in overseas transportation, and I wonder whether that is bad. To sell U.S. products abroad, we have to buy something abroad—and, if we buy overseas air rides for tourist travel, that doesn't compete with domestic production and transportation the way buying steel or machinery or autos abroad does.

Foreign travel by U.S. tourists seems to me to be about the least painful “import” we can have—as far as its effect on domestic industry and freight traffic is concerned.

MORE RR RECORDINGS—I've received two long-playing records of steam locomotive sounds from Stan Kistler, P. O. Box 4068, Pasadena. Both are labeled “This Is Railroading,” Volume 2 and Volume 3 (price 5 bucks each). The first one is subtitled “freight service only” and the other one is “whistle in the woods”—its concentration being on the steam jobs (Shays included) in the logging business.

I put these discs on the phonograph, turned off the lights, and stretched out on top of the counterpane to listen myself a rest. With such assistance, it's easy to move back in time two or three decades.

'MEXICANIZING' NdeM—Fifty years ago the railways which now comprise the National of Mexico got rid of English-speaking dispatchers, conductors and engineers—who had been brought in from the U.S. to handle these jobs when the railways were built. Spanish-speaking employees—citizens of Mexico—had been unhappy at being barred from the top jobs in train operation. They insisted on having translators installed in dispatchers' offices, to put train orders into Spanish, for transmittal to train crews. The dispatchers objected to the presence of these translators, and walked out. They were followed by most of the English-speaking conductors and engineers. Thereupon, Spanish-speaking employees—Mexican citizens—moved into these operating jobs, and have held them ever since.

There were ceremonies in Mexico City recently to celebrate the half-century of “Mexicanization” of the railways—and a few survivors of the 1909 struggle were

on hand for the event. Prominent among the group (as reported in Mexico's weekly magazine “Tiempo”) was Don Benjamin Mendez, who now heads the National Railways of Mexico.

'URBAN RENEWAL'—I have a circular from a fellow named Robert M. Angier in Los Angeles—kicking about this “urban renewal” business, whereby a lot of city property is classified as a “slum” and is expropriated for demolition and redevelopment. Uncle Sam, as usual, pays a big part of the bill.

A town I know of in Connecticut had already decided to put in a sewer system, at its own expense—and then it found out that Uncle Sam would lift a large part of the check. A pure windfall. There is some legalized humbug like this, it seems, which invites practically everybody to put his hand in the public pocket and practically everybody—except the railroads—is doing it.

I can't think of any big industry, except the railroads, that hasn't succumbed to this temptation. The railroads don't talk frequently or loudly enough about their unique position as uncompromised private enterprise. They are undergoing the pain of strict adherence to principle—and getting none of the acclaim such conduct merits.

'EXCESS' CORRECTLY LABELED—I was told that when New York State put in its “full” crew law, the late L. F. Loree, then president of the D&H, purchased a rocking chair for each caboos, issuing instructions that it was to be used by the third brakeman. I asked D&H President William White whether he could verify this story. He tells me that none of the road's old-timers of whom he inquired can remember anything about it—so the story's probably apocryphal. But, true or not, it's a good story; and would not be out of character for L. F. Loree.

But Mr. White goes on to tell a “full” crew episode from his own experience on the Erie. Some state (W.W. doesn't remember whether it was N.Y. or not) enacted a “full” crew law. Whereupon Erie President Underwood issued instructions that the third brakeman should wear a badge, with some such wording on it as “excess brakeman.”

Trailer Repair Service Helps RRs

The Leonard J. Simons Company offers railroads a complete repair service on empty and loaded piggyback trailers in the Chicago area. Service is available 24 hrs a day, seven days a week.



"Calling QB 6-2285, calling QB 6-2285."

On the northwest side of Chicago, a railroad is having trouble at its piggyback ramp. Leonard Simons, president of the Leonard J. Simons Company, contractors of fleet and mobile refrigerator maintenance, takes the call on his radio-phone equipped car. His location—10 miles away, where one of his repair trucks is busy at another piggyback facility. The trouble—a trailer to be unloaded, with four lights out and broken landing gear. He gets the trailer number and its exact location, and a service truck is on the job in 45 min.

Calls like this are not frequent, but

it demonstrates the 24-hr, seven-days-a-week repair service which his company is providing to railroads on empty and loaded piggyback trailers in the Chicago area. Calls also come in by phone and radio to the company's central office in Melrose Park; others direct to its radio-phone trucks.

Mr. Simons, graduate engineer specializing in maintenance and repairs, believes his company is the only one in the United States offering this unique service. His aim is to concentrate all trailer repairs and provide preventive maintenance. His company not only takes full responsibility for all work, even on a jobbing basis, but will set up

equipment anywhere at any time on a contract basis. The service fills an existing gap in piggyback operations so loaded and empty trailers are expedited, with savings to the railroads and elimination of delays to shippers. Payment for all services begins at the time repair trucks arrive on location.

The Simons company started with mobile units offering and guaranteeing lubrication of plant machinery and equipment. Some 5,000 common carrier units in the industrial district are now inspected, lubricated and maintained. These include bus, air and pipe line, cartage, transfer and leased equipment. Entering the railroad field about



NEW REPAIR TRUCKS will get radio-telephone and general repair equipment.



SERVICING EQUIPMENT is shown parked at the south side piggyback ramp. Materials, including steel and repair parts, are available for immediate use.

BROKEN landing gear and defective hydraulic equipment are handled at the repair shop.



18 months ago, the company now provides trouble-shooting service for several major railroads. Work is done on trailers leased by the railroads when the road is responsible for maintenance; on common carrier trailers if repairs are authorized; and on railroad-owned trailers. Railroads using the Simons service normally provide the company with schedules of trailer arrivals and departures.

Complete Servicing Available

Any combination of separate or special service, up to complete general servicing of equipment, is offered. Where the railroad has no facilities available, all services are generally required. On one railroad, general inspection and repair work is done on specific trailers. This includes tire work, but no lubrication. General inspection includes tires, battery, brakes, wheel lugs, lighting system, air lines, couplings and doors. A western railroad—long established in the TOFC field—has contracted for complete maintenance, including diesel refrigeration units. General and pre-trip inspection on refrigeration equipment takes from one

to three hours. Special services may be only tire and lubrication work.

A Simons company service truck is usually on location every day. Incoming trailers are completely inspected and repairs made to insure prompt unloading. A separate repair card is maintained for each trailer. Returning empty trailers are parked to facilitate complete inspection of all interiors and needed repairs.

Special company-designed equipment on the trucks is used to test brakes and lights without having a tractor on hand. Trailers are washed and steam cleaned, inside and out, periodically. Floors on flat beds receive particular attention. Where a floor has been damaged, temporary repairs are made. When necessary, a complete new floor can be installed in 12 hours. New side stakes are fabricated, and damaged ones repaired. Emergency repairs are made to loaded trailers with broken frames, fifth-wheel mounts, etc. Prior to the Simons service, it was often necessary to call in four or five separate companies, each with a service call rate, to handle repairs. This method caused delays—and was costly.

The Simons company has a crew of

14 all-around mechanics and seven repair trucks. Two trucks are radio-phone equipped and applications for the others are pending. One truck is equipped for sand-blasting and steam cleaning, and has a special device for dismantling and mounting wheels. A crawler tractor is available to clean snow and ice from ramps. Two semi-trailers with steel and supply parts move from one piggyback ramp to another, depending on amount and scope of work to be done.

Various Repair Materials

Repair materials in the general service trucks include lenses; reflectors; bulbs; three sizes of mudguards; 20 sizes of bolts, washers and nuts; two 50-ton jacks; gasoline compressor and generator; acetylene burning and welding equipment; electric welding unit; air couplers; tube and pipe connections for air lines; vacuum and air relays, and all lubrication equipment. The tire truck carries extra 900 x 20 and 1000 x 20 tires, boots, tubes, extra wheel lugs and complete tire servicing equipment.

The company maintains a parts inventory in excess of \$15,000 to take care of emergency service.

A repair shop is located on the south side of Chicago, convenient to several piggyback facilities, to handle damaged and broken equipment. Here parts are salvaged, repaired, assembled and completed to original specifications, such as load binders, landing gear wheels, hydraulic equipment, etc. Load blocks and 2 by 6 oak bulkheads, of Simons design, are manufactured and permanently installed if desired. A tractor, available for physical brake test, is used also to bring trailers requiring extensive repairs to the shop. Engine oil analysis of mechanical refrigerator and power units is given the railroads every two months.

The company runs tests on standardization of equipment as an additional service to the railroads.

'Saves Time and Money'

J. D. Phillips, executive vice president, Milwaukee Motor Transportation Company, a subsidiary of the Milwaukee Road, has this to say on his company's recent contract with Simons:

"Having only started Flexi-Van service on the Milwaukee Road, we are not prepared to provide a complete maintenance service for our vans and wheel assemblies. Consequently, as a means of providing fast and uninterrupted service to our Flexi-Van patrons, a service such as this is useful. We feel it saves us both time and money."

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Billboard Paint on Box Cars?

PRO . . .

"We have found that the blue, white and red box cars do indeed keep our name before the public. The cars have become as much of a trademark for the Bangor & Aroostook as our keystone. Hardly a day passes when we don't get a postcard from a remote hamlet saying that the sender has seen one of our cars and it either reminded him of home or impressed him in some other way. The extra cost of painting the blue, white and red cars and keeping them clean (\$124 more than a solid color, with our facilities), seems to be justified in the gentle light of good public relations.

"We feel that we have gained about all that can be gained in this particular paint job and are now repainting some of our blue, white and red cars solid red with an oversized blue, white and red decal. The decal costs considerably less than the paint job and may do a comparable job for us. Naturally, the advantages to be gained from a billboard box car are magnified for the small railroad, i.e., the smaller railroad has fewer cars and it is to their advantage that they be attractively conspicuous. I suppose the same sort of logic would also hold true for a railroad the size of the Santa Fe, however.

"The advantages of the billboard type

box car are intangible. We have not found any way to measure in dollars and cents the good that we derive from them. The cards and letters we receive each day, however, convince us that with so many people getting to know the name of our small railroad it cannot help but be a benefit to us."—*Richard W. Sprague, assistant director of public relations, Bangor & Aroostook.*

"On the advantages of billboard box cars, I frankly would like to compare a box car with a highway billboard. You wouldn't advertise a product on a billboard in a whisper.

"Actually, a box car is a rolling billboard, and the name and trademark should be legible at a distance even when high-balling along."—*Alfred C. Strasser, art director, Pennsylvania.*

. . . AND CON

"We have not found it advantageous to use large white letters and black paint on our box cars. This is largely a price we paid for pride. When the Pennsylvania, Baltimore & Ohio, Western Maryland, New Haven, Boston & Maine and others were doing it, we just tried to keep up with the 'Joneses.'"—*S. T. W. Green, president, Lehigh & New England.*

Conducted by George C. Randall, district manager, Car Service Division, retired, this column is a forum for questions that railroaders are talking about. Both questions and answers are welcome from readers at all levels of responsibility. We'll pay \$10 to any reader submitting a question that forms the basis for a column discussion.

Billboard Paint on Box Cars: Pro & Con was suggested by a reader who wondered why some roads use the space on boxcar sides to advertise their name while others do not. One of the points against "billboard" cars this reader suggested was the negative public relations value of dirty paint.

Why Not Standard Railroad Wrist Watches? was raised in our column Sept. 7. So far, replies to this question have favored pocket watches. Do any of our readers feel that railroad standards of accuracy can be achieved in wrist watches now available?

Our third question this week is a good one, but who outside the iron curtain can answer it? If anyone can, send it in . . . G.C.R.

Why Not Standard Railroad Wrist Watches?

"When the Clinchfield completed the installation of centralized traffic control over its entire main line some few years ago, the Standard Time Rule was revised to eliminate requirements that employees have their watches inspected by a certified watch inspector, and that they have in their possession a watch certificate showing a record of these inspections. However, we do require each employee involved with train operations to have a standard railroad pocket watch while on duty and to compare time with a standard clock before beginning each day's work. Also, train and enginemen are required to compare their watches with a standard clock as well as each other before starting a trip.

"In train operation, particularly with time table and train orders when the time element is so important, we feel that the standard pocket watch is much safer and more dependable than the wrist watch."—*D. H. Hendrix, superintendent, Clinchfield.*

Who Can Answer This?

"The question 'Why Stagger Rail at Midpoint' (RA, July 20, p. 25), discussed the experience of Canadian Pacific with staggered joints. On pages 34 and 35 of the same issue appears an article on Red China, which states

that in its 'First Five-Year Plan' it built 3,060 miles of new lines. The article has a picture showing a track-laying machine carrying tracks the joints of which are obviously not staggered. The USSR also uses the same type of track-laying machines and according to the article 'has built more than 2,000 miles of railroad since 1951.'

"In view of the fact that a large percent of the rails laid in the USSR and Red China (representing a sizeable investment) are of the non-staggered type, I would like to propose a question. 'What has been the experience of the USSR and China in the use of non-staggered rails?'"—[These comments are from a reader who prefers to remain anonymous. G. C. R.]

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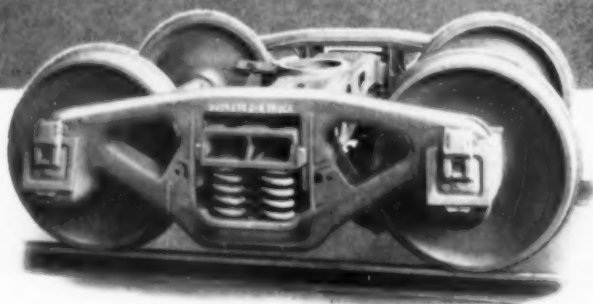
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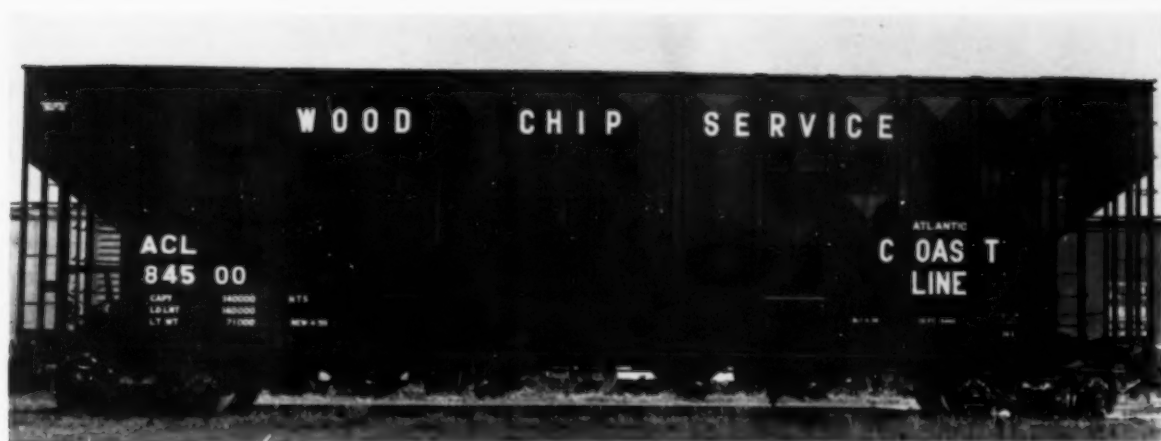
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▲ Load limit for big car is 70 tons. Inside length is 50 ft 3 $\frac{3}{4}$ in. Top cords and two points on sides are reinforced to withstand shakers.

► First load of chips moved in big hopper originated at Shamrock, Fla. Coupling with conventional hopper emphasizes dimensions of new design.



Big ACL Hoppers Move Chips

The Atlantic Coast Line has just completed 200 jumbo-sized hopper cars specially designed to handle wood chips. Chip loadings on all Southeastern lines have been increasing very rapidly. From 6,000 cords in 1953, consumption of this paper raw material grew to 1,203,000 cords in 1957, when it represented 6% of U. S. wood pulp production. Chip consumption has continued to grow each year.

Initially, ACL moved wood chips in standard coal hopper cars. The low density of the material made this movement unattractive. It was then that the Coast Line's mechanical department produced the design for a high-sided, quadruple-hopper car which has a capacity of 5,400 cu ft. This contrasts with the 2,770 cu ft of the ACL's conventional hopper cars.

Since last April, the Waycross, Ga., shop of the Coast Line has been assembling these cars on a ten-station production line at a rate of two cars a day. Nearly all of the components of these cars were fabricated by car builders and specialty suppliers and then shipped to Waycross for assembly.

The car is all-riveted and was designed to be unloaded with top- or side-mounted car shakers. It has conventional hopper doors and 35-deg slope sheets. These slopes are coated with an acrylic paint which was formulated with an added slip agent to give slippery surfaces and simplify unloading.

Because the car was designed to handle wood chips exclusively, it was possible to use 8-gage side sheets and $\frac{1}{4}$ -in. floor sheets in place of the heavier ma-

terials used in coal-handling hopper cars. This made it possible to keep the lightweight of this large car to 71,000 lb. With the exception of its height, the car conforms with AAR clearances, and the safety appliances all comply with current Interstate Commerce Commission regulations.

First load of chips to be moved in one of the new cars was from the Suwanee Lumber Co., at Shamrock, Fla., to the Hudson Pulp and Paper Co., at Palatka, Fla. Since then the cars have gone to numerous paper mills. It is reported that this design has evoked considerable enthusiasm on the part of pulp industries in the ACL territory. There are savings in switching and handling, and the cars can be dumped into existing paper mill hopper facilities.



15 PRR Steamers Make Last Journey

A solid train of 15 Pennsylvania steam locomotives—separated by empty box cars to distribute weight—moves around Horseshoe Curve near Altoona, Pa., en route to a midwestern steel mill to be cut up for scrap. PRR once owned as many as 7,650 steam engines. These Class

I-1s freight engines are among the last of the coal-burners to be scrapped. One of the few historic PRR engines which have been preserved is the K-4s enshrined in the Horseshoe Curve Park (center) as a memorial for the city of Altoona, where many steamers were built.

Harriman Award Winners Named

Union Pacific, Cotton Belt and New York, Susquehanna and Western will receive E. H. Harriman Memorial Award gold medals this week for achieving the best overall safety records in 1958.

Eleven other roads will receive Certificates of Commendation for setting the best safety marks in their respective regions and size groups.

The awards will be presented at a dinner at the Hotel Roosevelt in New York City Sept. 16. The presentations will be made by James G. Lyne, editor of *Railway Age* and chairman of the Harriman Awards Committee. Presiding over the dinner will be Cyril Ainsworth, president of the American Museum of Safety, which administers the awards.

UP will receive the gold medal for Group A, representing large lines. Cotton Belt will receive the gold medal for group B, comprised of medium-sized lines. New York, Susquehanna and Western will get the gold medal for Group C, which includes the smaller carriers.

Certificates of Commendation will go to the following Class I roads:

- Group A—East, Nickel Plate; South, Seaboard Air Line; West, the

Great Northern Railway.

- Group B—East, Elgin, Joliet & Eastern; South, Gulf, Mobile & Ohio; West, Frisco.

- Group C—East, Bessemer & Lake Erie; South, Atlanta & West Point and Western Railway of Alabama; West, Lake Superior & Ishpeming.

Two switching and terminal companies will also receive certificates. They are the Houston Belt & Terminal Railway, winner among the larger companies, and the Alton & Southern, chosen from the smaller ones.

The E. H. Harriman Memorial Awards were originally set up by the late Mrs. Mary W. Harriman in 1913 in memory of her husband, a railroad pioneer. They have been continued by two sons, W. Averell Harriman, former governor of New York, and E. Roland Harriman, chairman of the American National Red Cross. Statistics compiled by the Interstate Commerce Commission are used as a basis for the awards.

The safety ratings on which the Harriman awards are based include casualties to passengers on trains and in train and train-service accidents, and casualties to employees on duty in train, train-service and non-train

accidents taken from the ICC statistics.

Gold medal awards are restricted to Class I roads that perform 100,000 or more passenger-miles of service in addition to freight operations. The carriers are divided into three groups based on each line's total locomotive-miles of service as follows: Group A, 15,000,000 and above; Group B, 3,000,000 to 15,000,000; and Group C, 200,000 to 3,000,000.

Railroads may qualify for Certificates of Commendation regardless of whether they perform passenger service.

Paul F. Stricker, managing director of the American Museum of Safety, is secretary of the awards committee, which is headed by Mr. Lyne. Committee members include ICC Commissioner Howard G. Freas; Harold F. Hammond, executive vice president of the Transportation Association of America; Joe W. Kizzia, executive editor of *Railway Age*; E. Grosvenor Plowman, vice president of United States Steel Corp.; ICC Chairman Kenneth H. Tuggle; Owen Clarke, vice president of the Chesapeake & Ohio; John M. Fitzgerald, retired vice chairman of the Eastern Railroad Presidents Conference; Stanfield B. Johnson, chairman of the Association of South-eastern Railroads; David E. Mackie, ERPC chairman; C. M. Roddewig, president of the Association of Western Railways; and J. Handly Wright, vice president of the Association of American Railroads.

CPR Can; NYC Can't

Physically, the New York Central can load six small imported automobiles on a single flat car (see picture, RA, July 27, p. 80).

The Canadian Pacific can do the same.

But there's a big difference between the two.

NYC can't use its physical efficiency, because ICC Division 3 has ordered cancellation of reduced rates proposed on movements of imported autos-on-flat cars between New York and 11 midwestern cities. Reason: Highway carriers protested the rail rates; have kept NYC, so far, from participating in traffic which might total 2,000 carloads a year.

CPR can use its physical efficiency; has, in fact, been doing so for at least two years, according to S. M. Gossage, its vice president and general manager at Toronto. (Sometimes, Mr. Gossage says, it carries five of the midget autos and one or two larger ones on a single flat.)



CRACKED JOURNALS DISCOVERED ...before cars move over road

**CURTISS-WRIGHT ECHOMETER Spots Cracked Journals
... Quickly, Accurately, Simply**



Detected by the Echometer, the cracked journal shown in the main illustration could not have been discovered by any other yard inspection method. One road tested and proved the Echometer to be highly effective with a "mass journal screening" operation—discovering 81 cracked journals in six months. Any one of these cracked journals might subsequently have caused extensive damage.

Echometer Railroad Journal Test Sets detect defects in freight car journals ultrasonically. Simple to operate, these highly mobile and lightweight units signal cracked journals with both warning light and buzzer alarm. Up to 60 cars per hour can be checked with the Echometer, and rapid rates of inspection maintained in wheel shops and on repair tracks.

One Echometer user utilizes the test equipment at their interchange yards, with no extra personnel needed to inspect inbound freight cars. The regular inspection crew checks the journals on all inbound cars—invariably detecting cracked journals *before* the cars move on along the road. This preventive maintenance procedure is an invaluable safety service for each road concerned—eliminating potential trouble *before* it can occur. There are no operating schedule delays due to Echometer journal inspection.

A product of its Princeton Division, this economic and reliable railroad testing device is typical of the advanced technology which is at the service of Curtiss-Wright's world-wide governmental and industrial customers.

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Editors Afield

Associate editor Rod Craib made a long swing through Canada last month, covering the transcontinental lines of both CNR and CPR, and visiting some smaller carriers, too, for a comprehensive special Canadian Railroads feature to appear in the Nov. 2 Railway Age. Here are some sidelights of his trip.

Passenger volume, on the surface at least, appears to be holding up very well on the transcontinental trains of both Canadian National and Canadian Pacific. These trains run long—20 to 25 cars are not unusual—and most of the seats are filled. This, though, is largely peak tourist season traffic, and, as rail officials will point out, a substantial amount of it is made up of non-revenue passengers.

On one CNR 25-car train (the westbound "Continental"), there were seven head-end cars, six coaches, five tourist sleepers, four conventional sleepers, a cafeteria car, a diner and a lounge, with very few empty seats. Of the passengers, though, a CNR official estimated that as many as 40 per cent were riding on passes or reduced-rate tickets of some form.

Crack trains on both roads, the "Super-Continental" on the CNR and the "Canadian" on the CPR, will not honor passes (and their consists are usually four or five cars smaller than those of the "Continental" and the "Dominion").

There is a story, probably apocryphal, that the wife of a high Canadian Pacific official wanted to ride the "Canadian" but that her trip was vetoed by her husband. Even after the lady pointed out that she wanted to pay her own fare, she was still turned down on the grounds that no one would believe she was not riding free, no matter what the facts, and the Canadian Pacific's policy of not honoring passes on the "Canadian" would be harmed.

Pacific Great Eastern, which bases its passenger schedules on the year-round demand for its service, finds a strong tourist demand for space in its air-conditioned RDC's in the summer. These operate daily over the 465-mile route from North Vancouver to Prince George and cover some fine mountain scenery. For a small surcharge (\$2.75), passengers to Prince George get

reserved seats and three complimentary meals.

Ontario Northland Railway finds that its passenger service is just about holding its own year round, with summer schedules in particular improving. The road is putting in service three stainless-steel, reclining-seat coaches recently acquired from the Bangor & Aroostook, and says it is in the market for more second-hand coaches of this type. ONR provides dining service with a restaurant car that serves a full-course dinner for \$1.50 and makes money on it, in the summer at least. Among the features of the car are a full-length counter and girl waitresses. The line is currently building another car to the same design.

Steam locomotives are still to be seen in parts of Canada, but their numbers are diminishing rapidly, and both the CNR and the CPR expect to complete dieselization in 1960. Steam on the Canadian Pacific turns up in scattered points: in Montreal commuter service, out of North Bay, Ontario, in local service around Winnipeg, Manitoba, around Moose Jaw, Saskatchewan, and others. Steam on the Canadian National main lines is concentrated west of Winnipeg.

Track improvement for high-speed freight running is a major summer program on both the CNR and the CPR. With scattered exceptions, both roads are predominantly single-track main lines, and the cross-country traveler meets one gang after another taking advantage of good summer weather to change over rail, put in new ballast, improve tunnel clearances, straighten curvature, and install new signaling, all with an eye to faster running.

The Royal Tour this summer also accounted for some improvements that might not have been cycled for immediate action. In general, both big Canadian roads spruced up their properties for the royal party's eyes. Primarily, this included painting and patching where necessary, but in at least one case on the Canadian Pacific's Mountain sub-division, a lush nude that had been an engineer's landmark on a rock beside the track was sand-blasted into oblivion. A fireman who still feels a sense of loss adds that, ironically enough, the royal train passed the area at night.

NYCTA Contract for 230 MU Subway Cars Signed

A contract for 230 multiple-unit subway cars for the New York City Transit Authority's BMT Division has been signed with the low bidder for the job, St. Louis Car Co. The new cars will be the first replacements on the BMT Division in 45 years.

Purchase price of the new cars was announced as \$27,446,950. The 230-car order is the first step in the Transit Authority's announced program to replace 2,750 old BMT cars with new ones at a total cost of approximately \$260,000,000 (RA, Sept. 7, p. 43).

The contract, which received approval from the New York City Board of Estimate on Aug. 20, was signed by Edwin B. Meissner, Jr., president of St. Louis Car, and Transit Authority Chairman Charles L. Patterson on Sept. 9.

Delivery of the new cars will be at a rate of 20 per month, beginning in May 1960. The new cars have several modern features that have not been used before on the BMT lines, although these features are incorporated in two orders of 100 and 110 cars respectively now being delivered for the IRT Division.

Among the features the Transit Authority called attention to in the new cars is their "married pair" design. The new cars will operate in semi-permanently coupled pairs. Each will have only one motorman's cab instead of two, as has been customary in earlier designs. The motor-generator for both units will be mounted in one car. The other will have an air compressor that will serve its mate's brakes as well as its own. In the same way, one unit will carry batteries for both cars.

By eliminating duplicate equipment not needed for operations, the cost of the car is reduced. Mr. Patterson pointed out. Other cost saving factors have also been incorporated in the new design, he said, such as the use of fiberglass and polyester two-piece moulded seats in place of the conventional seat and back cushions now in use.

The new cars are some 600 pounds lighter than earlier models. Mr. Patterson noted, and a 10-car train of the new design will require considerably less power than a similar train of the older cars. Since the TA no longer generates its own electricity but now buys power from an outside source, this is an important consideration, he said.

Although contracts for motors and controls have not yet been placed, Mr. Meissner indicated that he expected the contract to be divided equally between General Electric and Westinghouse.



SPENO

Here are the up-to-date facts on the SPENO Ballast Cleaning and the SPENO Rail Grinding Services.

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SPENO Engineering and Research has developed a superior screening arrangement so that we are now using an improved Ballast Cleaner with greater efficiency.

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Our Rail Grinding Service has been so well received we are now building a *THIRD* Rail Grinding Train to take care of the increased demand.

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Marketing Concept Gets Results

► **The Story at a Glance:** The marketing concept applied to freight sales is progressing on Western Pacific. Until labor trouble—strikes in non-ferrous metals, steel and trucking—hit the West, WP was well on its way to achieving the initial goal set for its new approach to sales.

Malcolm W. Roper, the road's vice president—marketing, concedes that the shakedown period "has not been without its problems [but] the majority of such problems seem to be behind us and we are making progress as a team."

Western Pacific traffic and revenue figures for the first six months of 1959, compared to first-half '58, indicate to the road that it is making progress with its newly created marketing division. First-half carloadings rose 12.3% and freight revenues climbed 13.8%, the road's marketing vice president reports.

A succession of temporary setbacks has since hit the road—a copper strike, the steel shutdown, a Teamster strike, the drying up of a government grain move the WP enjoyed last year—but

these reversals haven't dimmed Western Pacific's enthusiasm for its new approach to sales.

As Mr. Roper sees it, "There's little doubt that the principle of this new concept of marketing transportation itself will be adopted by all major railroads, as well as by other carriers, in an effort to participate in our burgeoning economy and to make it easier for our customers to do business with us."

WP has learned from the problems that cropped up in the course of setting up its marketing division. Mr. Roper outlined the road's experiences and the lessons it's learned in addressing a conference and seminar of the American Society of Traffic and Transportation last week at Michigan State University.

"Old habits and approaches to problems are not quickly changed," he said. "Specific examples of problem handling had to be analyzed from the benefit of hindsight to determine where integration of effort between the various component departments of our marketing division—sales, pricing, service, equipment, research and industrial develop-

ment—had not been as complete as had been contemplated. From such reviews, certain patterns of approach to problem solving have emerged.

"Like reviews have been made of inter-departmental handling with similar beneficial results. Such reviews will be a continuing process as part of our control system.

"Also, there has been the necessity of orienting the newly-hired personnel, smoothing out the relations between them and their newly-formed associates, assigning and clearly defining responsibilities under the new marketing concept, developing the proper relationship between line and staff. . .

"I'm happy to state that the majority of such problems seem to be behind us, and now we are making progress as a team. Adoption of the marketing concept by industry has been beneficial to both the customer and the producer. I'm confident marketing of transportation will be equally productive of benefits both to shippers and to transportation agencies.

"Were we now to make the change-over, has experience taught us anything? Definitely, yes. We would spend more time in advance of the change outlining to those in the division the difficulties, shortcomings and weaknesses of the former system and how we believed the proposed system would aid the individual's productivity potential, job enlargement, growth and development—how it would give wider scope of responsibility and more opportunity for initiative and creative thinking, as well as other personal satisfaction . . . thereby creating benefits to the individual as well as to management.

"We would also solicit their ideas concerning the changes, any desirable modifications thereof and the timing to be observed. To the extent possible, such ideas would be worked into the plan.

"One effect of such an approach would be to obviate doubt, fear or sense of threat to individuals or their jobs incidental to the proposed changes. This would help to eliminate the grapevine, with its speculations and attendant distortions. Another benefit would be the development of a greater sense of participation on the part of the group and thereby the creation of a psychological and functional asset."

On the Western Pacific, Mr. Roper said marketing means the determination of:

- What a customer wants or needs.
- Where and how the customer de-



Southern 'Echoscopes' Car Journals

Hidden defects in freight car axle journals don't stay hidden from the "Echoscope," an electronic device used by car inspectors at all Southern Railway interchange points. The device probes for defects with ultrasonic waves. It travels—along with

other inspection and repair tools and parts—on this sled-type crawler used along inspection tracks as trains are prepared for the road. The new ultrasonic detection device was built by Curtiss-Wright for the Southern.

sires that want or need to be fulfilled.

- What price the customer is willing to pay.

After those determinations are made, the road develops answers to a second set of queries, usually through inter-departmental discussion:

- Is the railroad set up to furnish the wanted or needed service? If not, what modifications are required? What will be the expenses incidental to modifications?

- Can the railroad furnish the services where and when and how they are wanted? If not, what changes are necessary?

- Can the railroad meet the pricing requirements and still produce the essential level of profit?

- Where does the competition fit into the picture?

- Are any changes required in corporate policies, sales force, distribution methods, advertising and promotional activities?

This marketing concept, Mr. Roper said, "is a far cry from the former practice where the operating departments decided what kind of service could be offered and it was up to the traffic solicitor to fill his pockets with cigars and go out and try to sell it."

Basically, the marketing division consists of the former traffic department plus a number of related functions. (Sub-groups have been given wide-ranging responsibilities. The new market research department, for example, is concerned not only with development and analysis of statistics essential to marketing, but also with assisting customers with materials handling problems; initiating rail equipment modifications to fit customer needs; and analysis of shipper operations to determine how WP can tailor its product in other areas such as pricing, sales, service and industrial development to give the shipper more nearly what he needs and wants.)

The initial goal for the new division was an increase of 20% over 1958 carloadings (RA, April 20, p. 9).

100,000th Passenger Rides "Q" Slumbercoach

Burlington's Slumbercoaches have passed the 100,000-passenger mark in less than three years' regular service.

The road introduced the Budd-built cars Oct. 28, 1956, on the "Denver Zephyr" operating between Chicago and Denver-Colorado Springs. Since then, the cars have averaged 33 passengers per car trip, for an average occupancy rate of 80%.

The 100,000th Slumbercoach passenger was a Labor Day weekend traveler.



Trans-Pacific Flexi-Van—Just Around the Corner

States Marine Lines, a world-wide shipping company, plans experimental Flexi-Van service between Seattle and Japan. Above is one of

eight containers ordered from Strick for the tests. The shipping company is said to have the necessary bogies in the Orient. (RA, Aug. 31, p. 7.)

Wabash: Still an Optimist

A change in management hasn't changed Wabash's faith in the future of both the industry and the railroad itself. President Herman H. Pevler told the Kansas City, Mo., Chamber of Commerce last week.

Mr. Pevler, who succeeded Arthur K. Atkinson as Wabash president July 1, pledged the road to "endeavor to foster industrial development and continue the improvement of our fixed plant, to provide the equipment needed for our patrons and to tailor our service to meet their requirements."

As for passenger service, he added, "Wabash has a reputation for providing good, comfortable, reliable passenger service and has used almost every device known to promote this service. This, I can't take any credit for, but I can say that it will be my purpose to continue this policy to provide the best service possible as long as the patronage is sufficient to come close to the break-even point. In other words, we will not desert the passenger—the passenger must desert us."

Mr. Pevler was critical of the slowness of progress in implementing major provisions of the Transportation Act of 1958. He made these points:

- "Although there have been applications made for the guarantee of nearly \$65 million in loans, the [Interstate Commerce] Commission has approved only \$4,000,000 for federal guarantee."

- The train-off provision of the act "has worked fairly well. While those of us engaged in this business feel it is rather cumbersome even yet, we be-

lieve it is better than the former practice of long, laborious handling through various state commissions."

- "Although motor carriers have placed rates in effect for the transportation of agricultural commodities brought under regulation by the act, the ICC is still engaged in a general investigation of these rates and no final action is expected for several years."

- The new rule of rate-making "has had little effect on the Commission's activity on approval or suspension of rates so far. Until the last few days, the policy of the Commission still seemed to ignore the inherent economy of rail transportation and to protect competitive forms of transportation. However, last Friday, the Commission approved rates on paint filed by the railroads which have been before the Commission for quite some time—and this is the first major change in the Commission's policy."

Nevertheless, he said, the Transportation Act is a turning point. And, beginning with that, "I believe that the economic situation in which this industry operates will be more and more fully recognized and that such corrective measures will be taken as are necessary."

"In the meantime, we on the Wabash will continue to provide the best service possible to meet the requirements of our patrons and therefore justify our usefulness. We will plot our course, believing that our problems and inequities, in time, will be solved."

Riders Up, So Are RR's Losses

► **The Story at a Glance:** "Operation Northeast," the second of Philadelphia's experiments in getting riders off the streets and into rail transit, began last week. The Reading Railroad, which will provide the rail service for "Operation Northeast," took the occasion to release its bookkeeping on the first six months of "Operation Northwest." The figures showed two things: (1) encouraging progress has been made towards the city's goal of cutting traffic congestion, but (2) the increased volume on the Chestnut Hill branch did little more than offset the loss from reduced fares and did not substantially affect the Reading's losses in the service.

Philadelphia's "Operation Northwest" began last week providing low-cost, frequent rail service to 10 communities on the Reading's 11-mile Fox Chase branch. Like the earlier experiment, "Operation Northwest," which involved both the Reading and the Pennsylvania Railroads, the new plan:

- Cuts fares—fares under the plan are a flat 30 cents instead of the 45 to 56 cents previously charged.

- Increases service—Monday through Friday service is increased almost 75% by the addition of four morning and four evening trains.

- Provides 40-cent joint fares on the railroad and certain connecting bus lines of the Philadelphia Transportation Co.

The first experiment, "Operation Northwest," began in October 1958 on the Chestnut Hill Branches of the Reading and the Pennsylvania (RA, Oct. 27, 1958, p. 82). These branches, like the Fox Chase branch involved in "Operation Northeast," lie entirely within the city limits and so do not require approval by any governmental body outside the city.

The Reading, in a statement released last week, summed up its reaction to the experiment as follows:

"The facts . . . clearly point up the serious problem facing the City of Philadelphia and its adjacent counties and the railroads serving Philadelphia and their commuters. They show that persons can be attracted to the rails from the highways if given reasonable service and reasonably low fares. At the same time, they also show that the increased volume does little more than offset the loss suffered from reduced fares and does not substantially affect the staggering deficit now incurred by the railroads in performing such service. If this service is to be

continued, public funds must be used.

"The railroads joined with the City of Philadelphia in 'Operation Northwest' to determine what effect reduced fares plus increased service and certain interchange privileges between the rail lines and PTC buses would have on the travel habits of commuters to and from Philadelphia and on the deficits incurred by the railroads in operating the rail commuter service. The arrangement contemplated a six-months operation during which the railroads would continue to bear their deficits from the operation and the revenue loss, if any, from the reduction in fares, with the City contributing an amount approximating the bare cost of operating the added trains desired by the City. The City's contribution to the Reading was \$46,300. The Reading had been operating 33 round trips per day on Mondays through Fridays, and the City requested that this number be increased by three additional round trips. Somewhat greater increases were made in the train service on weekends.

"The operation has shown that the experiment is highly successful in at-

tracting persons from the highways to the rails. 'Operation Northwest' showed increases in passengers ranging from 6.6% in November, 1958, to 18.2% in April, 1959. This increase in passengers, however, was not sufficient to offset the loss of revenue from the reduction in fares, so that the Reading actually suffered a revenue loss during this six-month period of \$54,450.

"During the period of 'Operation Northwest,' the railroads were engaged in a comprehensive study of the cost of operating their passenger services, excluding mail, baggage and express, in the Philadelphia suburban area . . . The study showed that, for the year 1957 (the latest calendar year for which the information was then available), the expenses incurred by the Reading in operating its passenger service in the Philadelphia suburban area approximated \$8,000,000, compared with revenues of \$5,000,000, leaving a deficit of \$3,000,000 . . .

"Following completion of the foregoing study, the Reading undertook a similar study of the cost of its pas-

(Continued on page 66)

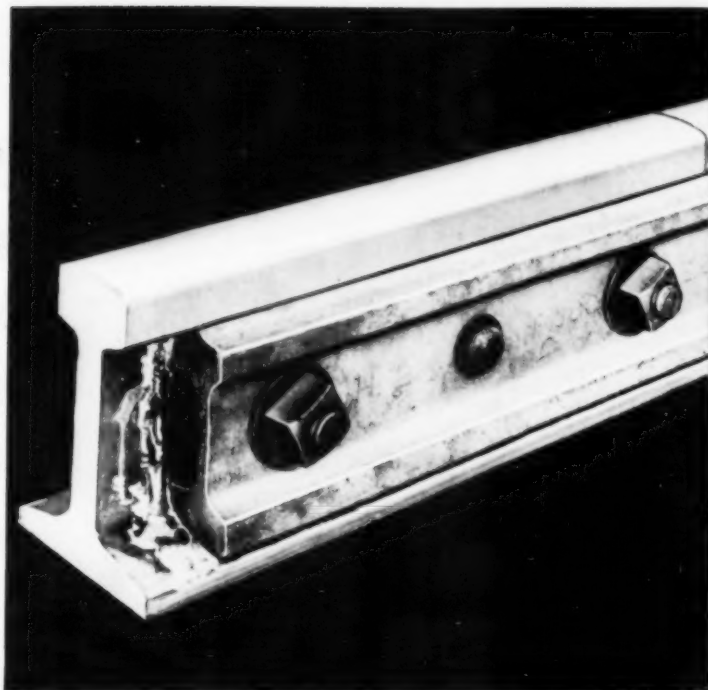
1875 to 1959

You can't see the conscientious care, the patient pains we put into every International Tie. But you can observe the natural results of such dutiful dedication. That's why our every tie carries the famous International Dating Brand. It's the most compelling way we can think of to show you what a fine product this is. For there, in the date, is the most positive proof of quality you could ever want . . . years and years of service under actual conditions. Isn't this the kind of tie you want your rails to ride on?

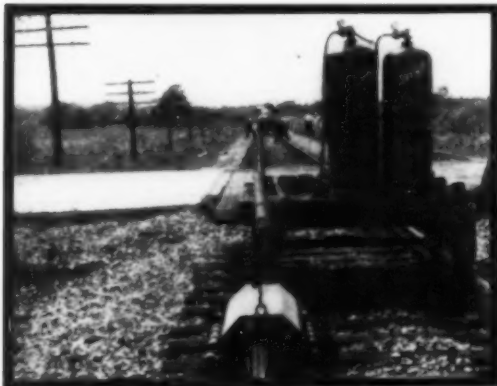
INTERNATIONAL CREOSOTING AND CONSTRUCTION COMPANY, GALVESTON, BEAUMONT, TEXARKANA.



**NOW
add many years
to track life
with
Bondarc
Adhesive**



Sandblasting (above) removes rust, scale etc., insures maximum bond strength. Preheating of joint bars and rail ends (below) improves flow properties of the adhesive.



Distributors of Bondarc Adhesives
in the United States and Canada

**New system "freezes" rail joints to give you
the maintenance savings of continuous track
plus the adaptability of jointed track**

Results of a three-year testing program show that the life of existing track can be extended by bonding the rail joints with new Bondarc Adhesive.

Bondarc was developed by the Industrial Division of Armstrong Cork Company especially for bonding joint bars to rails. It cures in minutes, "freezing" the joint into a rigid unit. The result is a smooth, continuous running surface that eliminates rail-end batter and other maintenance problems involved in jointed track. Yet when a rail must be removed, as on curves, the bond can be broken, then quickly reestablished to restore continuity of the track.

TEST RESULTS

Tests at Lehigh University, and the Armstrong Research and Development Center show Bondarc joints resist slippage under loads of 250,000 to 300,000 pounds. Installations on U. S. and Canadian railroads have been in service for over two years. All show excellent results, though subjected to temperatures ranging from -40° F. to 120° F.

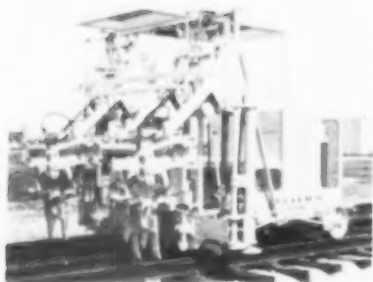
EASY TO USE

First, rail ends and joint bars are "sandblasted" to remove surface contaminants. Bondarc is then applied to the contact surfaces of the joint bars and the joint is bolted together in the usual way. Under heavy traffic conditions, the joint may be postheated to accelerate "curing" of the adhesive. Ten joints can be easily assembled in 30 minutes, even by an inexperienced crew.

For further information visit Booths 60 and 61 at the Association of Track and Structures Supplier Exhibit in Chicago or write to:

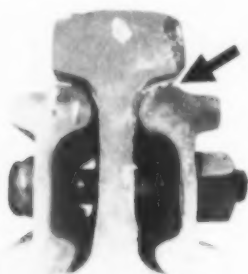
RAIL JOINT COMPANY
DIVISION OF POOR & COMPANY (INC.)
50 CHURCH ST. NEW YORK 7, N. Y.

NEW PRODUCTS REPORT: What's new



Jack-Spot Tamper

Introduction of the Model 1960 Jackson Jack-Spot Tamper has been announced. The machine, which is said to be adapted for raising track against a wire, features electric push-button controls and two independently operated workheads. Each head is equipped with vibratory tamping units which are controlled for separate or combined working. A turntable helps reverse or set-off the unit. *Jackson Vibrators, Inc., Dept. RA, Ludington, Mich.*



Rail Joint Adhesive

A special adhesive, called Bondarc, is available for joining rails into continuous lengths. It is manufactured by the Armstrong Cork Company and distributed by the Rail Joint Company. Bondarc is stated to be a thermosetting adhesive that forms, through molecular linking, an extremely strong bond with the material to which it is applied. The material is said to be unaffected by the elements. The manufacturer states that the technique for "freezing" rail

joints with Bondarc has been tested satisfactorily for two years on railroads in the United States and Canada.

The adhesive is applied manually and is allowed to cure for 20 to 30 min, at which time the bond is said to be sufficient to hold the joint immobile. Ultimate strength is claimed to be reached within 2½ to 4 hr. Tests have shown, it is said, that a rail joint consisting of 132-lb rail and six-bolt joint bars joined together with Bondarc has a tensile strength of 250,000 lb. *Rail Joint Company, Dept. RA, 50 Church St., New York.*



Tamping Jack

Production of as much as 40 rails per hour is claimed for a new machine designated the Model TJ-2 tamping jack.

The new unit is adaptable for use with a wire device, scope and target, or a spotboard. A jacking element works independently of the main carriage to leave its four wheels in normal contact with the rails, thus facilitating the use of any leveling device. Two lift rams, independently controlled to facilitate leveling or superelevation, raise the track as much as 16 in. Four heavy-duty vibratory tampers are mounted on two independently and hydraulically operated work heads. The tie adjacent to the jack is tamped. The tamping is done only at the outside of the rails, which is said to produce better track stability and direct ballast feeding to the tools.

The unit is powered by an air-cooled gasoline engine and an alternator. A fluid drive provides variable speeds up to 20 mph. *Tamper Limited, Railway Division, Dept. RA, 160 St. Joseph St., Lachine, Que.*



Spot Tamper

Announcement has recently been made of several improvements in the Fairmont W99 one-man-operated, self-propelled spot tamper. Improvements include a two-wheel drive, a small foot brake, increased power for the propelling motor and a drawbar at each end. Set-off lift is claimed to be reduced by 60 lb by moving the hydraulic engine to the tamping side of the unit. *Fairmont Railway Motors, Inc., Dept. RA, Fairmont, Minn.*

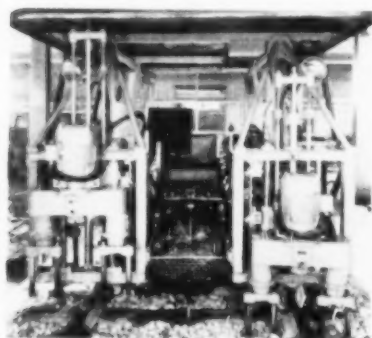


Monorail Tamper

Equipped with "Track Maintainer" tamping units, the new Jackson Monorail tamper is claimed to be ideal for spotting and smoothing, secondary maintenance programs and all yard-track maintenance. It is a self-contained, self-propelled machine operated by one man. The new tamper is designed to place ballast under one rail at a time by means of two JS-type electric tamping units which are held in a cross-tamping position, that is, diagonally.

in engineering and maintenance of way

nally across the rail and tie. The tamping units are supported by one workhead and are each equipped with two tamping bars. The vibratory motors are rated at 4000 to 4500 vibrations per minute. Traveling, indexing and operation of the workhead are hydraulically actuated and controlled. A power ramturntable is provided on the unit to reverse its direction of travel, transfer it to the opposite rail or remove it from the track. A set-off and a trailer for towing the machine behind a truck are furnished. *Jackson Vibrators, Inc., Dept. RA, Ludington, Mich.*



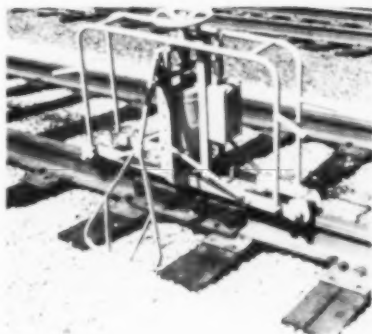
Automatic Tamber

A new machine, designated the Electromatic tamber, combines automatic and manual operation. When automatic is selected, the operator depresses a remote-control button. This starts a cycle of operations.

The machine moves forward until an electric finger at the head end contacts the tie to be tamped. The unit then is automatically braked in position over the tie, the tamping heads lower into the cribs and they continue down until a predetermined pressure or down-thrust setting is obtained. The tamping tools vibrate and squeeze until a second preset or inward thrust is reached. The tools then raise to an adjustable position above the ties, completing the cycle.

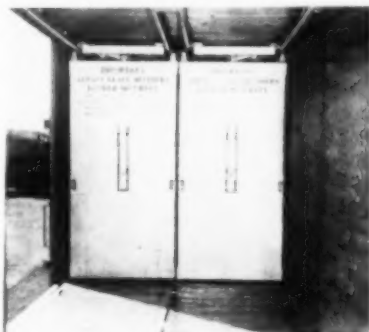
The unit is powered by a water-cooled diesel engine. This drives an alternator and hydraulic pumps.

A jack with a turntable is located at the center of gravity of the unit for reversing its direction of travel or for removing it from the track. *Tamper Ltd., Railway Division, Dept. RA, 160 St. Joseph St., Lachine, Que.*



Electric Grinder

A new electric grinder is available for grinding the surfaces or ends of rails. Designated the Model P-62-E, it weighs 275 lb and is stated to be easily maneuvered and operated by one man. It is designed to assure precision operation with minimum vibration and long service life. Equipment includes an 8-in by 2-in cup grinding wheel. *Railway Track-work Company, Dept. RA, 3207 Kensington Avenue, Philadelphia 34, Pa.*



Load Divider

"Equipco" load dividers are mounted on a pivot-type hanger which rolls on tracks the length of the car. Dividers are equipped with ceiling and floor keepers and spring-loaded lock bars. According to the manufacturer, a single retractable handle in each divider makes it easy to position and lock the units at almost any spot in the car to separate and hold loads of various sizes. Dividers can be locked in place flat against car sides or ends, out of the way of loading or un-

loading operations. The units, built of high tensile steel, are permanently mounted and offer a smooth surface to load against. According to the maker, the dividers don't interfere with car refrigeration. There's no metal-to-metal contact with the car, no loss of refrigeration efficiency. "Equipco" was designed to cut loading time and costs and to permit load-sealed I.C.I. shipments. *Equipment Specialties Division, Union Asbestos & Rubber Company, Dept. RA, 332 South Michigan Avenue, Chicago, Ill.*



Track Sweeper

Designated the Trak-Sweeper is a new machine which removes excess ballast from the tops of ties subsequent to a raise and for leveling ballast in the track and across the crib areas in readiness for a production tamber. For the latter operation, the Trak-Sweeper is positioned between the jacking operation and the tamber. A rotating impeller, mounted on the front of the machine, sweeps the ballast. It has four bands of very heavy rubber which are especially shaped for cleaning the rail base. The impeller is raised and lowered hydraulically and has two rotating speeds. The slow speed is for leveling ballast ahead of the tamber and the high speed is for removing excess ballast after tamping. A deflecting baffle, against which ballast is thrown for removal from the tie area, is mounted on its own wheels ahead of the Trak-Sweeper. It can be adjusted for varying rail heights and removed separately from the track. A turning arrangement and set-off rails are furnished. *Nordberg Manufacturing Company, Dept. RA, Milwaukee 1, Wis.*

People in the News

ASHLEY, DREW & NORTHERN.—Robert R. C. Miller, president of this road at Crossett, Ark., has been named vice president—planning and development for Consolidated Freightways at San Francisco.

BRITISH & IRISH RAILWAYS.—The New York office has moved to the International Building, 630 Fifth Avenue.

J. I. McIntosh, sales representative, appointed Pacific coast manager at Los Angeles, succeeding **Ernest Cartwright**, who retired Oct. 21.

BURLINGTON.—Ernest L. Potorf, assistant vice president, appointed vice president, operating department, to succeed **Samuel L. Foo**, who retired Sept. 1.

P. W. Bell, district storekeeper, West Burlington, Iowa, named inspector of stores, Chicago, replacing **J. J. McCoy**, who retired Sept. 1. **C. G. Schaeufele** named to succeed Mr. Bell.

CANADIAN NATIONAL.—G. A. Thomas, assistant to general freight agent, Montreal, appointed assistant to freight traffic manager, Toronto. **Henry McRandal**, chief clerk, freight traffic department, Montreal, appointed district freight agent, Sherbrooke, Que., succeeding **G. E. S. Chabot**, named district freight agent, Montreal. Mr. Chabot succeeds **Edwin DesRosiers**, appointed assistant division freight agent, Montreal. **G. C. Foster** named assistant to general freight agent, Montreal.

Lorne W. Walker, general agent, passenger department, appointed general mail and baggage agent, Atlantic region, Moncton.

D. K. MacIver, appointed regional rule instructor, Winnipeg, succeeding **F. A. Gouge**, named trainmaster at Port Arthur, Ont.

Robert Lyall, master mechanic, Prince Edward Island division, appointed trainmaster of the newly created Northumberland division.

Harvey F. Little, treasury assistant, appointed assistant to treasurer, Montreal, succeeding **L. Barnes**, transferred.

William R. Corner, assistant comptroller—revenues, Montreal, appointed co-ordinator of data processing, succeeding **W. P. Moffat**, recently named assistant chief of transportation.

F. M. Crocker, district passenger agent, St. John, N.B., transferred to Moncton.

J. A. Lomas, assistant superintendent, Stratford, Ont., transferred to the Belleville division. **J. A. Clark** named trainmaster at Belleville, Ont.

CANADIAN PACIFIC.—J. M. Roberts, assistant general traffic manager, Montreal, appointed general freight manager there, succeeding **C. D. Edsforth** (RA, Aug. 31, p. 58).

D. A. L. McDonald appointed assistant general freight agent—rates, Montreal, succeeding **K. D. Carmichael**, promoted to assistant to freight traffic manager—system, rates and divisions, Montreal, replacing **W. Miller**, promoted.

E. P. Jolicœur appointed special assistant to president.

CHESAPEAKE & OHIO.—Zack G. Laney appointed personnel officer, Cleveland. Mr. Laney was formerly secretary of the Employees' Stock Purchase Plan. **John C. Thompson**, personnel services officer, Cleveland, appointed employee relations officer there.

Charles L. Spittler, assistant general auditor—staff, Detroit, retired Aug. 31.

COTTON BELT.—A. E. DuRocher, assistant general auditor, Tyler, Tex., appointed general auditor there, succeeding **Sterling Baker**, who retired Sept. 1. Mr. DuRocher's successor is **W. H. Meyer**, auditor of disbursements, Tyler, who in turn is replaced by **J. W. Huvendick**, assistant auditor of disbursements. **C. C. Mueller**, tax accountant, Tyler, named to replace Mr. Huvendick.

DELAWARE & HUDSON.—P. E. McGaughan appointed assistant to superintendent of equipment, Albany, N.Y., succeeding **J. F. Farner**, who retired Aug. 31.

DULUTH, MISSABE & IRON RANGE.—Wallace G. Hohman appointed superintendent of communications, Two Harbors, Minn., succeeding **Bernel H. Bailey**, superintendent of telephone, telegraph and train communications, who retired Aug. 31.

ERIE.—Paul A. Talkington, Jr., commercial agent, Atlanta, Ga., appointed general agent, Youngstown, Ohio, succeeding **R. A. Sause**, retired.

Frank A. Roberts appointed assistant valuation engineer, Cleveland, succeeding **Edward Q. Higgins**, who retired Aug. 31.

GREAT NORTHERN.—B. G. Anderson appointed assistant chief engineer, St. Paul, to replace **H. S. Loeffler**, who retired Aug. 31.

LOUISVILLE & NASHVILLE.—Norman F. Hurt office manager, executive department, appointed to the newly created post of staff assistant, general traffic department, Louisville, Ky. **William L. Bradshaw** named traffic analyst, general traffic department, a new post. Mr. Bradshaw will be concerned with research on freight rates, marketing and other traffic matters.

Marvin D. Jones appointed attorney, law department. Mr. Jones was formerly with U.S. Corps of Engineers at Louisville, as attorney-advisor.

NEW HAVEN.—F. E. Moran, Jr. appointed superintendent New Haven freight terminal, with headquarters at Cedar Hill, Conn.

NORFOLK & WESTERN.—Lawrence B. Hurd, general agent, Lynchburg, Va., retired Sept. 1. **C. R. Purdum** appointed general agent at Philadelphia.

NORTHERN PACIFIC.—J. O. Davies, superintendent, Rocky Mountain division, Missoula, Mont., transferred to the St. Paul division, Minneapolis, to succeed the late **G. L. Sloroh**. **D. H. King**, superintendent, Fargo division, Fargo, N.D., named to replace Mr. Davies, and in turn is succeeded by **K. A. Box**, assistant to the general manager, Seattle. Mr. Box's successor is **R. K. Mossman**, special assistant to the general manager, Seattle, who in turn is succeeded by **R. W. Humphreys**, office engineer, St. Paul.

READING.—Lloyd A. Hornberger, division freight agent, Philadelphia, named assistant general freight agent, succeeding **James Lawson**, who died July 21. **James I. Smith, Jr.**, coal freight agent—sales, appointed division freight agent, Philadelphia. **Andrew Negro** general agent, Wilmington, Del., named coal



J. M. Roberts
CPR



E. P. Jolicœur
CPR

freight agent—sales, **William A. Gehl**, traveling freight agent, Philadelphia, appointed general agent, Wilmington.

Abolished office and position of superintendent stations and transfers, Philadelphia.

RICHMOND, FREDERICKSBURG & POTOMAC.—Hunter J. Thompson, Jr. appointed editor of RAIL-O-GRAM, employee magazine.

ROCK ISLAND.—Traffic offices opened in Suite 260, Union Station, Kansas City, Mo., effective Sept. 1.

ROSCOE, SNYDER & PACIFIC.—A. H. Honey, vice president—operations, Roscoe, Tex., retired Sept. 1. **R. O. Dobbins**, auditor—treasurer, appointed treasurer. **L. A. Haynes** appointed auditor. **Jack Collins, Jr.**, named trainmaster, with jurisdiction over train movements, maintenance of way, and shops. **Glen E. Pitts** appointed general freight agent—rates and divisions.

SANTA FE.—J. H. Blake appointed assistant general manager, Albuquerque and Los Angeles divisions, and **E. R. Robertson** named assistant general manager, Los Angeles Terminal, San Francisco Terminal, and Valley divisions, both with headquarters at Los Angeles, to succeed **F. N. Stuppi**, promoted (RA, Aug. 10, p. 37). **F. L. Elterman** appointed superintendent, Kansas City division, Argentine, Kan., replacing Mr. Robertson. **W. R. Henry**, superintendent, Plains division, Amarillo, Tex., transferred to the Eastern division, Emporia, Kan., to succeed Mr. Blake. **T. W. Goolsby** transferred from the Pecos division, Clovis, N. Mex., to replace Mr. Henry, and in turn is succeeded by **W. A. J. Carter**, superintendent, Slaton division, Slaton, Tex. Mr. Carter's successor is **K. C. May**, superintendent, Panhandle division, Wellington, Kan., who in turn is succeeded by **H. J. Briscoe**, trainmaster, La Junta, Colo. **J. R. Fitzgerald**, trainmaster, San Angelo, Tex., succeeds Mr. Briscoe, and in turn is replaced by **Earl Gillmore**.

Robert E. Gehrt appointed special assistant in the public relations department, Chicago, effective Sept. 1, to succeed **Frank N. Grossman**, named traveling representative, San Francisco.

S. E. Byler named assistant to general manager in charge of contract department, Los Angeles.

SEABOARD.—Frank H. Ginrich appointed district passenger agent, Cleveland, Ohio.

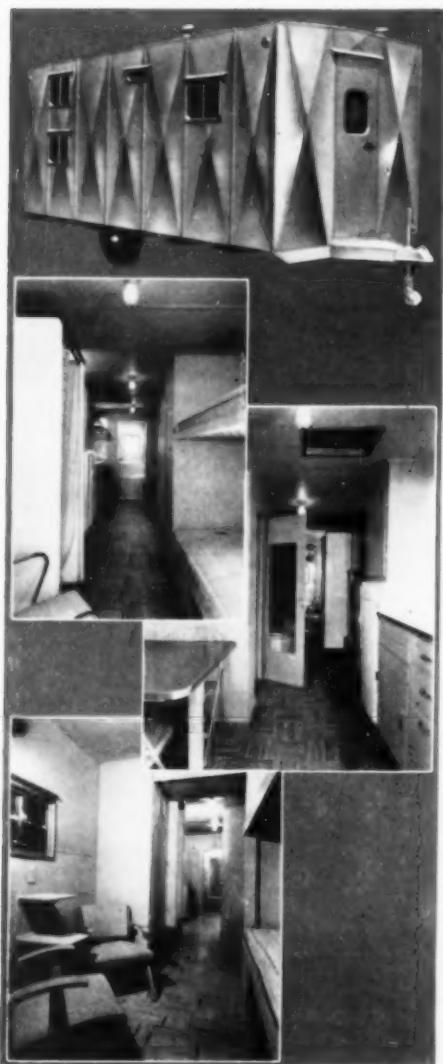
J. W. McCaughey, commercial agent, Baltimore, appointed general agent there, succeeding

(Continued on page 62)

Do you use WORK TRAINS?

If you do chances are 99 to 1 they're old pullmans
or remade boxcars — or both. If so . . .

Here's Morrison-International's
new ***Campcar*** that gives
you these 5 big benefits



1. **EASY MOVE** — goes to the work site *off track!*
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3. **BETTER HOUSING** — step up crew's efficiency — men like them!
4. **FLEXIBILITY** — job size determines camp size . . . at job site.
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No tie-up of sidings — no on-track move needed to get ***Campcar*** where wanted, when needed — easily towed by ordinary vehicle. Crews work with greater efficiency and productiveness where Morrison-International ***Campcars*** replace work trains. Fewer men required — costs are less when ***Campcars*** do the job — and the railroad gets a whale of a saving!

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CAR DIVISION

MORRISON-INTERNATIONAL CORP.

1439 Bailey Avenue — Buffalo 12, N. Y.

Shops — Kenton, Ohio



(Continued from page 60)

ing **M. P. Gibson**, transferred to Philadelphia to succeed **I. J. Hetherington**, retired.

J. F. Chandler named assistant engineer of construction at Richmond, Va.

SEATRAN LINES.—Operations of the Texas City-Houston and New Orleans-Belle Chasse terminals have been placed under the newly created Gulf division, headquartered at Texas City, Tex., under supervision of **W. A. McAuliffe**, former New York Port terminal manager. Reporting to Mr. McAuliffe will be **F. E. Wegener, Jr.**, superintendent of operations, Texas City-Houston, and **J. P. Hebart**, superintendent of operations, New Orleans-Belle Chasse.

The newly created Atlantic division at Edgewater, N.J., will be headed by **T. L. Carvatt**, former Texas operations manager. Reporting to Mr. Carvatt will be **William Miller**, superintendent of operations in charge of Edgewater terminal, and **C. E. Seaman**, superintendent of operations, Savannah, Ga.

At New York, **R. C. Gifford** appointed general manager of operations, reporting to **Donald W. Smith**, vice president operations. **P. G. Murphy** appointed assistant general manager of operations.

SOO LINE.—**H. F. Schumacher** appointed assistant freight claim agent, Minneapolis, Minn., succeeding **W. J. Cecko**, retired.

SOUTHERN.—**Fred N. Stadler**, district freight agent, Louisville, Ky., appointed general agent, Milwaukee, Wis., succeeding **Thomas F. McGurn**, retired. **John L. Hyde, Jr.**, commercial agent, Dallas, Tex., succeeds Mr. Stadler.

SOUTHERN PACIFIC.—**William W. Allen** ap-

pointed senior assistant division engineer, Western division, Oakland Pier, Cal., replacing **George H. Fair**, who retired July 31.

F. E. Hoefler, superintendent, Dallas-Austin division, Ennis, Tex., retired Aug. 31.

TEXAS & PACIFIC.—At Los Angeles, **A. N. Overall**, assistant traffic manager, appointed Western traffic manager; **J. E. Large**, general freight agent, named assistant Western traffic manager; **Howard S. Birchenoll**, district manager—perishable freight service, appointed perishable traffic manager; and **Warren A. Post**, traveling freight agent, advanced to perishable freight agent.

At San Francisco, **Joseph H. Dessen**, general freight agent, appointed assistant Western traffic manager.

Harris J. Ducote, commercial agent, Pittsburgh, promoted to general agent, Birmingham, Ala. **James W. McCoy**, traveling freight agent, San Francisco, named general agent, Oklahoma City, Okla., succeeding **J. W. Prescott**, retired.

R. E. Butler appointed district passenger agent, St. Louis.

Carl Kirk appointed freight claim agent, Palestine, Tex.

Byron B. Williams, Jr., assistant general agent, Fort Worth, Tex., appointed general agent there, to replace **Gail D. Tatum**, named general freight agent. The following promotions announced at Dallas: **Gustav A. Ryser**, assistant freight traffic manager; **Opal D. Bates** and **Curtis E. Willis**, general freight agents; **Louis E. Hartman**, **John W. Osborne** and **Billy T. Bates**, assistant general freight agents.

Harvey H. Tilford, assistant general agent, Dallas, Tex., advanced to general agent there, succeeding **Charles A. Johnston**, appointed general freight agent.

TOLEDO, PEORIA & WESTERN.—**Eugene C. Potter** named Central sales manager and **James J. Craig** (from Philadelphia) appointed sales manager, both at Chicago. In Los Angeles, **Robert Huersch** appointed Western sales manager and **Robert A. Pepper** (from Chicago) named sales manager. **Arthur W. Chandler** leaves Cleveland to become sales manager at Philadelphia.

TRANSPORTATION CENTER, NORTHWESTERN UNIVERSITY.—**Dr. Leon N. Moses** appointed assistant director of research for the center. He was formerly a member of the Harvard Economic Research Project.

UNION PACIFIC.—**A. O. Mercer** appointed auditor of general and station accounts, Omaha, Neb.

J. F. Menous, district storekeeper, Eastern district, Omaha, appointed assistant general storekeeper, General Store, Omaha.

WABASH.—**John M. Fricke**, auditor of disbursements, St. Louis, appointed local treasurer there, succeeding **Lawrence G. Holt**, who retired Sept. 1. **E. J. Sondhaus** succeeds Mr. Fricke.

OBITUARY

Horace L. Martin, retired general eastern freight agent, Norfolk & Western, New York, died Sept. 1.

Supply Trade

The **Timken Roller Bearing Co.** will build an additional railroad bearing producing facility in its Columbus railroad bearing plant at a cost of \$5,250,000. The new unit, with an annual producing capacity capable of equipping 20,000 freight cars with All Purpose "AP" railroad bearings a year, will bring the total capacity of the Columbus plant to over 40,000 car sets a year. Estimates indicate that the line will be in operation by the fall of 1960. About 150 additional employees will be needed to man the new line.

James H. Chillas has been appointed a sales representative for the Los Angeles territory, industrial products division, **Automatic Electric Sales Corp.** **Harold M. Coldren**, sales representative, has been transferred from the San Francisco territory of the western district to Los Angeles.

D. E. Clisbee, general commercial sales manager at New York, has been appointed district sales manager, Gulf Coast district of the **Graybar Electric Co., Inc.** This district includes Houston; New Orleans; Beaumont; Corpus Christi; Jackson, Miss.; Baton Rouge; and Lake Charles, La. **A. I. Loyer**, manager of supply sales at Houston, has been appointed district sales manager, Ohio Valley district, which includes Cincinnati; Nashville; Columbus, Ohio; Dayton; Louisville; Lexington; Evansville, Ind.; and Charleston, W. Va.

Thomas W. Morrison has been appointed director of engineering and research for **SKF Industries, Inc.**, Philadelphia. Mr. Morrison was formerly assistant to the engineering and research vice president. The engineering and research departments were formerly under direction of Vice President **Gunnar Palmgren**, who will serve as vice president and special consultant to the president until his retirement at the end of the year.

(More Supply Trade on page 67)



Milwaukee Assumes PU&D Service

The Milwaukee Road has taken over pick-up and delivery service on LCL and Flexi-Van at Milwaukee, Wis., through its subsidiary, the Milwaukee-Motor Transportation Co. The move makes Milwaukee the first point on the railroad where PU&D is performed by the carrier subsidiary, rather than by an independent cartage company. The change-over

involved purchase by the subsidiary of more than \$175,000 worth of new equipment. Thirty-eight units—14 tractors, 22 trailers, two trucks—are assigned to the Milwaukee operation. Dispatcher **Clarence Goldsmith** (left, with driver **Richard Cody**) will coordinate the service from the railroad's Fowler street freight house.

TWIN FRICTION ACTION

means

REDUCED DAMAGE CLAIMS

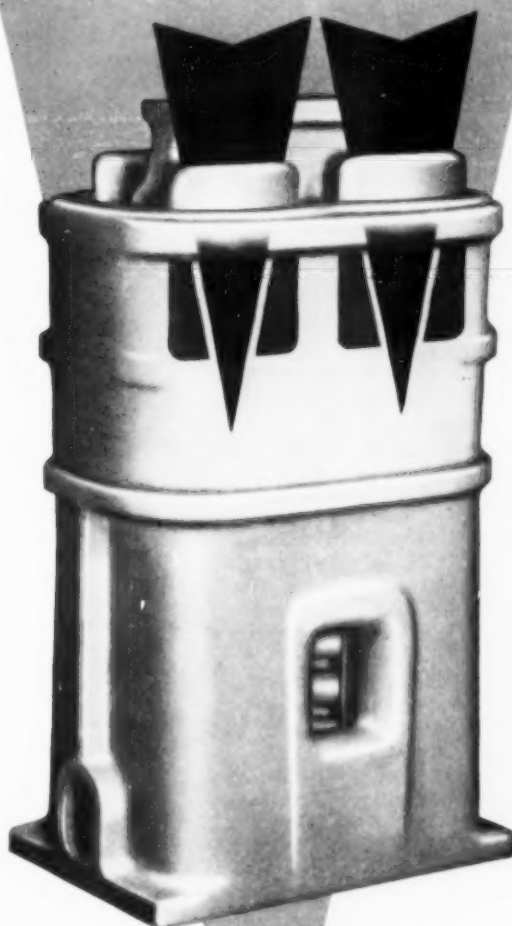
Two "shock-stopping"

Friction clutch mechanisms
give Extra Measure of

Protection to Lading...

There's a good reason for it... Exclusive Peerless Twin Friction clutch mechanisms combined with 4 powerful springs, reduce damage claims by *more effectively absorbing shocks—more efficiently dissipating impact energy*... Lower transmittal ratio keeps lading protected from dangerous impact shocks... Chances of jamming due to severe impact are greatly reduced because of independent nest operation—You get an *Extra Measure of Protection* that means reduced damage claims.

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9-554RA



COIL RACK CAR has permanent pockets and separators, and will handle eight 52-in. coils. P&LE has 10 of these units.

The three 70-ton gondolas shown on this page are part of the Pittsburgh & Lake Erie's contribution to boosting steel traffic on the railroads.

The road has built 37 hooded coil cars, 55 covered gondolas and 10 coil rack cars at its McKees Rocks shops. This is new equipment, built this year. The three cars are standard gondolas equipped with skids, racks, shock absorbers and component parts fabricated and built at the shops. The special hoods and covers were supplied by equipment manufacturers.

In addition, the road has 137 special coil cars which have been in captive service locally for several years.

The new hooded coil cars (above, right) are equipped with two floating skids and shock absorbers. Floors are wood. The 52-ft units can take coils up to 7 ft in diameter and weighing 35,000 lb. Wood-faced channel-steel separators can be adjusted to 16 positions. The hoods, which remove easily, are insulated and vented for all-weather protection of large coils of finished rolled steel plate.

The P&LE covered gondola cars (bottom, left) each have four removable bulkheads that can be pinned in 30 positions. Each car is equipped with an insulated three-section overlapping hood that covers entire car. Placed in service prior to the steel strike, these cars have run up an excellent damage-free record on shipments of such finished-steel products as sheets, tinplate, coils, bars and pipe.

A similar record of damage prevention—"not a claim so far"—has been compiled by the 10 coil rack cars (above left). These units, equipped with two permanent pockets and separators, can carry eight 52-in. coils.

P&LE Builds Special Cars for Steel Traffic



HOODED CAR will handle steel coils up to 7 ft in diameter and weighing 35,000 lb. Hoods are insulated and vented for all-weather protection and can be lifted on and off easily. The road has built 37 hooded coil cars, 55 covered gondola cars and 10 coil rack cars at its McKees Rocks shops so far this year. Hoods and covers used on the cars were supplied by equipment manufacturers.



REMOVABLE BULKHEADS in covered gondola can be adjusted to as many as 30 positions. Car has a three-section overlapping hood.



INSIDE hooded coil car are floating skids. Separators can be adjusted to 16 positions. Above is exterior view of this unit.

MARKET OUTLOOK *at a glance*

Carloadings

Carloadings of revenue freight for the week ended Sept. 5 were not available as this issue went to press.

Loadings of revenue freight for the week ended Aug. 29 totaled 548,820 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS For the week ended Saturday, Aug. 29			
District	1959	1958	1957
Eastern	77,976	91,630	115,550
Allegheny	80,439	108,973	146,036
Poconantas	47,799	55,355	64,458
Southern	112,161	111,541	123,352
Northwestern	67,230	104,112	122,686
Central Western	114,321	124,592	120,117
Southwestern	48,894	50,023	53,421
Total Western Districts	230,445	278,727	296,224
Total All Roads	548,820	646,226	745,620
Commodities:			
Grain and grain products	49,307	54,313	48,185
Livestock	5,574	5,632	6,775
Coal	101,660	116,665	139,912
Coke	2,910	6,412	11,171
Forest Products	42,823	37,618	40,962
Ore	9,178	56,881	84,996
Merchandise I.C.I.	42,206	51,627	56,334
Miscellaneous	295,162	317,078	357,265
August 29	548,820	646,226	745,620
August 22	542,561	634,231	739,240
August 15	543,844	626,314	750,640
August 8	532,304	619,204	740,471
August 1	544,464	622,678	740,708

Cumulative total,
35 weeks ... 21,114,756 19,594,989 24,284,774

PIGGYBACK CARLOADINGS.

U. S. piggyback loadings for the week ended Aug. 29 totaled 8,643 cars, compared with 5,846 for the corresponding 1958 week. Loadings for 1959 up to Aug. 29 totaled 271,177 cars, compared with 171,344 for the corresponding period of 1958.

IN CANADA—Carloadings for the 10-day period ended Aug. 31 were not available as this issue went to press.

New Equipment

FREIGHT-TRAIN CARS

► *Baltimore & Ohio.*—Will equip 100 box cars with Buffalo Brake Beam's Brake X. The 100 units are part of a 500-car order which B&O plans to build in its DuBois, Pa., shops (RA, Aug 17, p. 27).

► *Chesapeake & Ohio.*—Ordered 200 70-ton, 85-ft flat cars: 100 of them from ACF; 100 from Pullman-Standard. Delivery is expected early in 1960.

► *Missouri Pacific.*—Directors authorized acquisition of 1,300 new roller-bearing freight cars at an estimated cost of \$14,000,000. Fifty 70-ton covered hoppers will be ordered from General American for delivery in October. Missouri Pacific shops at DeSoto, Mo., will build 1,250 cars, as follows: 850 50-ton box cars (of which 250 will be equipped with double doors); 250 box cars equipped with DF loaders (of which 50 will be 70-ton cars with cushion underframes, and 200 50-ton cars, including 100 equipped with double doors); 100 70-ton covered hoppers; and 50 70-ton covered gondolas.

► *New York Central.*—Ordered 200 70-ton flat cars plus 100 additional 70-ton flats for Pittsburgh & Lake Erie. Pullman-Standard will build the 300 cars, with delivery scheduled to begin in December.

► *Western Maryland.*—Ordered 400 70-ton hoppers from Bethlehem Steel at an approximate cost of \$4,440,000. Delivery will start in April 1960.

PASSENGER-TRAIN CARS

► *New York City Transit Authority.*—Ordered 230 new MU cars for its BMT Division from St. Louis Car Co. at a cost of \$27,446,950. Delivery will be at a rate of 20 per month beginning in May 1960. Order is the first step in the Authority's announced \$260-million program to replace 2,750 old BMT cars. (See page 52.)

New Facilities

► *Canadian National.*—Ordered 72 locomotive radio sets and 45 wayside station radios from Bendix Radio to provide end-to-end and train-to-wayside communication on the line between Edmonton, Alta., and Vancouver, B.C. The locomotive equipment operates on one frequency for end-to-end and a second for train-to-wayside. The wayside station equipment has the dispatcher control feature whereby the stations may be controlled by a division dispatcher over open wire lines.

► *Chicago & Eastern Illinois.*—Will spend approximately \$330,000 for construction of 2½-mile lead track to serve a General Electric plant and other industries which may locate in an industrial area southwest of Mt. Vernon, Ind. The project will be completed in mid-September.

(Continued on following page)

MARKET OUTLOOK (continued)

► **Chicago Transit Authority.**—Awarded contracts totaling \$2,675,705 for construction of four new stations and installation of power distribution and communications systems for the Congress Expressway rapid transit line.

► **Delaware & Hudson.**—Is installing remote control interlockings at Carbondale, Pa., and SH Cabin. These will replace hand-operated switches thrown by switch tenders. The new interlockings will be controlled from a machine at Hudson, Pa., which is 32 miles from Carbondale and two miles from SH Cabin. The installation will cost \$241,700 and will result in annual savings of \$67,000.

► **Frisco.**—Awarded contract for grading for new three-mile freight main track at Springfield, Mo. Total estimated cost of the project: \$600,000.

► **Gulf, Mobile & Ohio.**—Will construct a new enginehouse at Glenn Yard, Chicago, Ill., at an estimated cost of \$100,000.

► **Milwaukee.**—Will convert semi-automatic protection at 17 crossings in Chicago to automatic operation. Project will cost about \$100,000, will include both flasher-type signals and gates. Construction will begin in the fall, with completion expected by the end of the year. Under present conditions, four watchmen handle the gates at the 17 crossings one eight-hour shift daily. Line involved is Milwaukee's freight connection with the Chicago North Shore & Milwaukee.

► **Missouri Pacific.**—Current projects not previously reported include a raise in grade made necessary by construction of Oologah dam and reservoir, Oologah, Okla., \$898,200; stabilization of roadbed to eliminate slide condition at Columbia, La., \$116,900; reconstruction of Bridge No. 170.2 at Ewelder, Tex., \$95,800.

► **Northern Pacific.**—Asked bids on construction of two bridges over the Heart River near Mandan, N. D. Each project calls for a 200-ft span on concrete piers with a 45-ft approach span on each side of the truss span. Estimated total cost: \$750,000.

► **Northwestern Pacific.**—Nine construction projects underway involve total expenditure of approximately \$304,000. Biggest project (\$65,000) includes extension of two yard tracks and replacement of three trestles at Willits, Calif. Bridge and tunnel work and replacement of a track scale account for the rest of the new-construction expenditure.

► **Santa Fe.**—Ordered 327 "Stan Pac" radio base stations and 370 "Handie-Talkie" portable radiophone units from Motorola.

► **St. Paul Union Depot.**—Installation of electronic mail sortation system will involve total cost of approximately \$950,340. Stewart-Warner Electronics, division of Stewart-Warner Corp., is the prime contractor and will install the electronic conveyor equipment on a lease purchase basis at a cost of \$838,540. Additional work to be performed by company forces (conversion of 500 mail trucks, installation of platform catwalks and other building changes) and by an outside contractor (electrical) will cost an estimated \$111,800. Total cost will be participated in by eight proprietary railroads (RA, May 11, p. 60).

RIDERS, LOSSES RISE

(Continued from page 56)

senger operation between Reading Terminal and Chestnut Hill. This study, covering the six-month period, November, 1958 through April, 1959, has just been completed. It discloses that, during the first six-month period of 'Operation Northwest,' the Reading received passenger revenues of \$262,000 and incurred expenses of \$702,000, leaving a net deficit of \$439,000. On an annual basis, this deficit would approximate \$800,000.

"The railroads agreed to continue 'Operation Northwest' for an additional six-month period to October 24, 1959. The extended six-month operation has continued to show a substantial increase in passengers carried over the corresponding months of the previous year. In May, 1959, the increase was 17.4%; in June, 21.2%; and July, 42.9%. The July figures overstate the actual increase in riders because they are based upon ticket sales, and in June, 1958, sales were at a subnormal level because the riders had purchased tickets for use in July and August in anticipation of the increase in commuter fares that became effective in June, 1958. Time will tell whether this increase of 42.9% will continue during the succeeding months. The Reading sincerely hopes that it will.

"July, 1959, was the first month in which the increased travel had the effect of more than offsetting the revenue loss from the fare reduction. Even with this increase and the City's payment, the Reading still had to assume a monthly loss of approximately \$66,000, which, on an annual basis, would still be almost \$800,000 . . .

"As we approach the end of the second six-month period of 'Operation Northwest' and since we have now completed our thorough study of the results of the operation, we feel obligated to call these results to the attention of the City and the counties and the general public in order that the problem, which is thus presented, may be clearly before everyone. The Reading can no longer continue to bear a deficit of this magnitude."

A non-profit commuters' corporation has been proposed that may ultimately supersede both "Operation" experiments (RA, July 20, p. 54). This body, made up of railroad, railway union and City officials, would take over management of all intra-city rail branches. It would use the City's borrowing powers to finance an extensive modernization program that would eventually provide the rail network with air-conditioned, modern cars, park-and-ride facilities, and new stations for suburban service.



Bert Enos



Richard L. Terrell



Nelson C. Dezendorf



William H. Harvey



B. B. Brownell



Thomas B. Dilworth

SUPPLY TRADE NEWS (Continued from page 62)

Bert Enos has been named editor of *Railway Purchases and Stores*, a Simmons-Boardman publication, 79 W. Monroe St., Chicago. Mr. Enos was formerly associated with F. D. Thompson Publications, Inc.; with Modern Railroads, as managing editor; and with Advertising Publications, Inc. Before going to Chicago in 1951 he was a newspaperman with Midwest dailies and with the United Press. Mr. Enos teaches a course in business paper editing at Northwestern University.

D. A. Bessmer has been elected president of the *Timken Roller Bearing Co.*, Canton, Ohio, succeeding William E. Umstad, who retired as president on Aug. 31, but will continue as a director and as chairman of the executive committee.

Richard L. Terrell, administrative assistant to the general manager of the *Electro-Motive Division of General Motors*, has been elected a vice president of GM and appointed general manager of EMD, succeeding Nelson C. Dezendorf, who will be vice president in charge of the Dayton, Household Appliance and Electro-Motive group of GM. Cyrus R. Osborn has been elected an executive vice president of GM and will have jurisdiction over the Engine divisions, Dayton, Household Appliance and Electro-Motive group, and the Overseas and Canadian group.

William H. Harvey, coordinator of new products, has been appointed to the newly created position of director of production; B. B. Brownell, chief engineer, named to the newly created post of director of engineering and research; Thomas B. Dilworth, assistant chief engineer, named chief engineer.

The *Burry Corporation* has purchased Colonial Works, Inc., 223-231 Norman Avenue, Brooklyn 22, N.Y.

Willis Ditmanson has been named national parts and service manager, *Motorola Communications & Electronics, Inc.*

Edwin B. Watson has been named chief engineer, Diesel department, *Scintilla division, Bendix Aviation Corp.*, succeeding Louis J. Garday, who plans to retire but will continue as full-time consultant. Mr. Watson has been associate professor of Mechanical Engineering at Cornell since 1947.

Volume Held Key to Profits

If the Maine Central could double its present volume of freight, the road could slash its rates 20% and still be better off financially, President E. Spencer Miller declared last week.

"A railroad thrives on volume," Mr. Miller told the New Hampshire-Vermont School of Banking. "It takes the same crew for a 75-car freight train that it does for a 200-car freight train. As volume goes up, unit costs go down and so do charges to industries and the public. As the government makes more feasible the use of highways by private or commercial trucking, rail volume is reduced, and the railroads, which are the rate makers, find themselves in the position of increasing or holding rate levels, resulting in an economic loss to the country which is impossible to calculate, but must be in the hundreds of millions of dollars. In other words, the taxpayer has spent hundreds of millions to provide and improve competing facilities in order that his transportation bill may be enormously increased.

"I have calculated that the present volume of traffic on the Maine Central amounts to about one-ninth of its capacity, and that if the volume of traffic were doubled we would reduce our

freight charges 20% and still be far better off, financially, than we are now, and what is true on my railroad is undoubtedly more true on those having a higher dollar investment per lineal mile of road."

Mr. Miller, who is chairman of the New England Railroad Presidents Study Committee, indicated that a merger of New England roads may still be far in the future.

"I believe that consolidation is an important element and a necessary objective, but I do not think it comes first," he said. "From the studies which are unfolding here in New England, we find that something else has to precede.

"There have to be fundamental reforms eliminating this [governmental] treatment, an unfair treatment of the railroads, and, if possible, subsidies to the opposition, and a general improvement of railroad credit of some, if not all, of the New England carriers if desirable consolidation is to be effected."

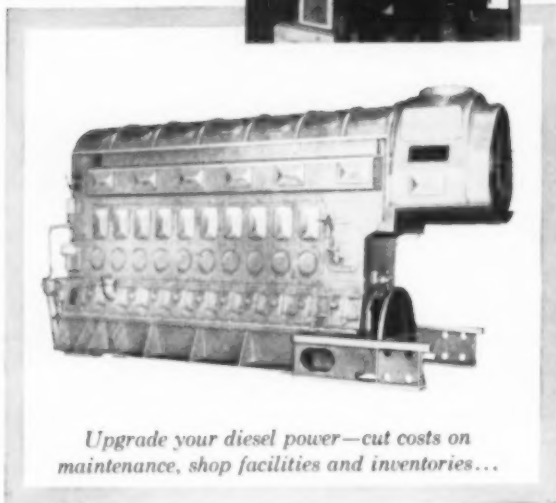
He said the problems of railroad managements are "more dissimilar than similar" and "this is particularly true in New England."

"The solution for the Maine Central," said Mr. Miller, "is fair tax treatment and freedom to manage a busi-

ness like a business—specifically, I mean freedom to run those trains and that kind of service which economic facts indicate. [The Maine Central, along with the Bangor & Aroostook, has asked permission to discontinue all passenger service in Maine. A public hearing will be held Oct. 5 at the State House in Augusta.]

"On the New Haven, my friend George Alpert [NH president] has other situations to face, and he must look boldly at other solutions. He told me the other day that if the New Haven could eliminate its passenger deficit, including of course the horrible millstone of commutation, that its showing would be equivalent to that of the mighty Santa Fe. This is a spectacular statement, but Mr. Alpert is running trains which are deemed to serve a public need. People have to get to work in the big cities. However, there is no reason to saddle the New Haven stockholders with the burden of the necessary cost of such service. The New Haven Railroad is a business institution and not an eleemosynary one. Mr. Alpert is taking not only a realistic and honest view, but a necessary one, when he looks to the taxpayers for subsidy and support."

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Remember: The only engine better than your present O-P is an Opposed-Piston diesel made better by Fairbanks-Morse. For full details and delivery schedules, write Fairbanks, Morse & Co., 600 South Michigan Avenue, Chicago 5, Illinois.

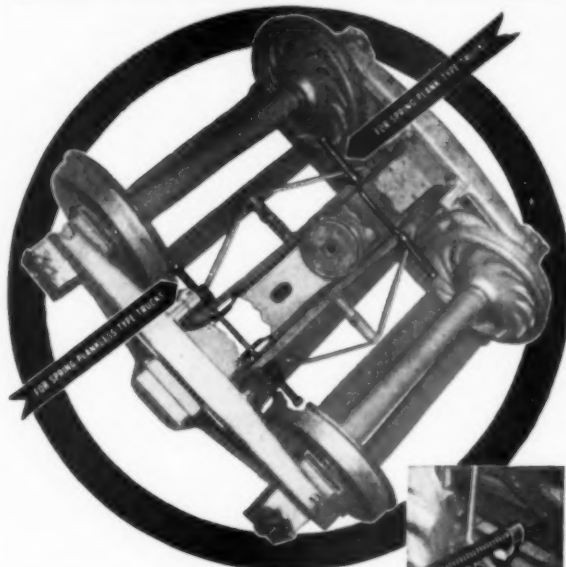


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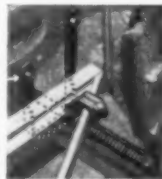
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3. Ideal for interchange repairs. New design permits easy and fast applications under all conditions. Nuts need not be removed to apply or remove the support.

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7. Prevents unnecessary wheel and shoe wear caused by dragging brake shoes.
8. GRIPCO supports can be removed and reapplied without removing nuts; therefore nuts are furnished in proper position.
9. Brake beams, rods, and levers are held in position under spring tension thus reducing false movements, chattering and wear of hangers, hanger pins and brake heads.
10. Can replace as a billable repair any support except A.A.R. recommended practice (angle-riveted and welded).

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You Ought To Know...

Fishyback on the Great Lakes is scheduled to start this fall. Browning Steamship Lines of Detroit says it will carry iron ore in the holds and aluminum vans on deck, and will provide service between Detroit, Cleveland and Duluth initially, and possibly later to Buffalo and Canada.

Steel shortages, and a lack of railroad orders, are behind Pullman-Standard's decision to suspend production at its Butler, Pa., plant effective Sept. 21.

Canadian Pacific has taken delivery of its 1,000th diesel locomotive (a unit built by Montreal Locomotive Works). CP's march toward full dieselization of operations on all lines is moving ahead on schedule. About 92% of the road's operations are now handled by diesels.

San Francisco area Teamsters have returned to work after a three-week strike which hampered, among other things, rail TOFC and LCL PU&D operations. Agreement on a two-year wage contract ended the walkout.

"Fog tickets" are now available—free—to Jersey Central commuters on days when JCL ferries suspend operations because of extremely heavy Hudson River fog. The tickets will be honored on the PRR from Elizabeth or Newark to New York.

An \$800-million monorail rapid-transit system has been offered to the city of Los Angeles in return for franchise rights and the use of the city's Freeways along which to build the necessary elevated structures. Los Angeles will "consider" the proposal made by Swedish multi-millionaire Axel Wenner-Gren.

A standard pocket watch and a coal scoop are Exhibits A and B in a new Illinois Central advertisement aimed at acquainting the public with the facts on the railroad work rules situation. Item A, IC says, "is a watch that was new years ago when engineers worked a full day for a day's pay. Today an engineer may complete his run and receive a full day's pay while his watch ticks off three hours." Item B "is a shovel guaranteed to raise no calluses. For railroad firemen today ride diesel locomotives with no coal to shovel, no boilers to tend." The watch and the shovel, the railroad points out, "symbolize two of many old-fashioned, outmoded 'working rules' that needlessly boost the cost of transportation and the price of almost everything you buy." IC's question: "Can your budget afford these expensive antiques?"

Boston & Maine has sold its 75-year-old Concord, N. H., station and 25 acres of land to All-State Realty Corp. for a reported price of \$329,000. A shopping center and an office building will be built on the site, along with a structure to house facilities still needed by the railroad. The road has also sold stations at Manchester, Nashua and Portsmouth, N. H. B&M hopes to dispose of all its passenger stations by July 1, 1960.

A new department has been established by the Canadian National, to coordinate the various rail, highway and piggyback services which the company provides for shippers of LCL freight. George R. Johnson, former freight traffic manager, has been appointed general manager of this new "Department of Merchandising Services" in Montreal.

Northwestern Pacific and the Eel River are at it again. Three new reconstruction projects are scheduled for the Scotia Bluff, Calif., area where the road will spend about \$190,000 to replace two trestles with a solid fill (a 72-inch culvert will drain storm waters) and to build a 360-ft concrete, steel and timber bulkhead to replace a trestle at another vulnerable spot.

Winthrop Rockefeller, chairman of the Arkansas Industrial Development Commission, will be a featured speaker at the 112th regular meeting of the Southwest Shippers Advisory Board Sept. 24 in Little Rock. Mr. Rockefeller's topic: The effect of freight rates on industrial development.

Freight-car handling and damage prevention will be discussed at a meeting of the Southeastern Claim Conference in Jacksonville, Fla., Oct. 27-28. H. W. Waters, superintendent of transportation, Central of Georgia, will lead the discussion.

New trends in rate-making and piggyback operations will be the theme of the fall meeting of the Railway Systems and Procedures Association at the Morrison Hotel in Chicago Oct. 6-8. Keynote speaker will be Northern Pacific President Robert S. MacFarlane.

Highest tax assessment for any single unit in Washington, D. C., is the singular distinction of the capital's Union Station. The station's land and buildings are assessed at \$7,224,000.

A new credit card plan scheduled to be introduced this fall by the Canadian National will be good for any of CNR's many services: rail travel, air travel via CNR subsidiary Trans-Canada Airlines, and Canadian National Telegraph.

Convention-minded traffic men can set themselves up for a busy autumn. Kick-off for the 1959 traffic convention season was last week's conference and meeting of the American Society of Traffic & Transportation at East Lansing, Mich. It will be followed by the Associated Traffic Clubs of America at Baltimore, Sept. 20-23; the National Small Shipments Traffic Conference at Chicago, Sept. 23-24; the Purdue University Conference on Packaging Specifications at Lafayette, Ind., Oct. 5-6; the National Association of Shippers Advisory Boards at New Orleans, Oct. 6-8; and, finally, the National Industrial Traffic League at Chicago, Nov. 12-13.

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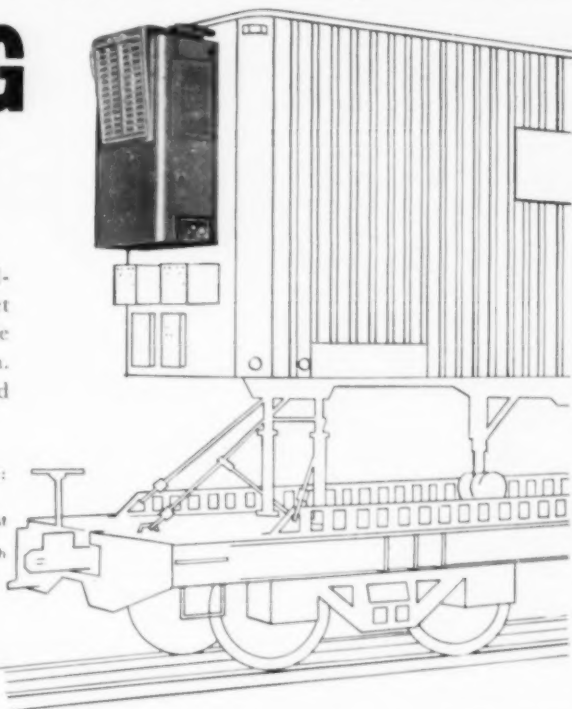
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Doing the 'Impossible' in M/W

“The difficult we do immediately; the impossible takes a little longer.” This declaration became the slogan of the United States Army Air Force during the last war. The end of that conflict signaled the opening of another kind of war for the maintenance-of-way officers of the American railroads. In this combat—which is still going on with no end in sight—achievement of the seemingly impossible has become routine performance for these officers.

The basic problem of the M/W officer stems from the fact that wages have been increasing at a far greater rate than gross revenues. The “impossible” being asked of these officers is the assignment to maintain the properties adequately, with little or no increase in allotments to compensate for the higher wages.

•

“Not long ago M/W ratios of 15 per cent were accepted practice . . . now 12 per cent is being questioned,” states C. J. Henry, the Pennsylvania’s chief engineer, in an address prepared for delivery this week before a joint session of the Roadmasters’ and Bridge & Building conventions. Mr. Henry, be it understood, is not complaining. He understands and appreciates management’s problem, and so do his colleagues on other railroads. He is merely stating a situation that must be faced and dealt with realistically. And that is what is being done on practically every railroad.

In their efforts to maintain the properties with the money allotted to them, railroad maintenance-of-way officers have displayed a degree of adaptability, flexibility, ingenuity and boldness unsurpassed—and perhaps even unmatched—anywhere else, in or out of the railroad industry. In developing specialized machinery (with the aid of the manufacturers) and in utilizing that machinery to get the most work done with the least expenditure of manpower, they have fashioned a whole new concept of maintaining railroad property. The revolution has been such that the M/W methods and equipment in use on the typical railroads today bear little resemblance to those in effect only 10 years ago.

The story of these accomplishments has been told in numerous articles published in this maga-

zine—but not the whole story. Because of opposition on the part of labor organizations—and a consequent fear of reprisals—some M/W officers have preferred to keep their most notable achievements under wraps. This attitude is understandable, but its effect has been to deprive other railroads of information that would be helpful in reducing their M/W costs, too.

Opposition and obstacles have, in fact, been the lot of the maintenance officer in his efforts to solve the problems that confront him. Experience has shown that the organized M/W brethren will usually, to some extent at least, attempt to thwart measures designed to reduce their employment. But the operating brotherhoods have also got into the act—and have secured rules requiring that some on-track machines be accompanied by operating employees. These rules make one of the ridiculous and reprehensible chapters in the annals of featherbedding. More often than not, these operating employees “earn” their wages without lifting a finger. In some cases the amounts paid to operating employees assigned to track-maintenance crews have equalled—even exceeded—the wages paid to the men who do the work.

Nor has top management always been as helpful as it might have been in helping M/W officers to solve their problems. Sometimes, for example, it has not been easy to convince management of the necessity for making large expenditures for machinery to reduce labor costs and for more durable materials to reduce the amount of labor required.

It must also be observed that management, in general, has not shown that it is entirely convinced of the wisdom of putting maintenance programs on a stable basis. Maintenance officers have frequently pointed out that maximum economy in the long run can only be realized by discarding, or at least minimizing, the stop-and-go or in-and-out practices in M/W programming. Events during the current steel strike indicate how little has been the progress in this direction.

ABOUT THE FUTURE: Maintenance men are fully aware that they will be expected to continue doing the “impossible.” And they will do it, too, still further reducing costs, provided they have the support of management, and are not subjected to crippling restrictions.

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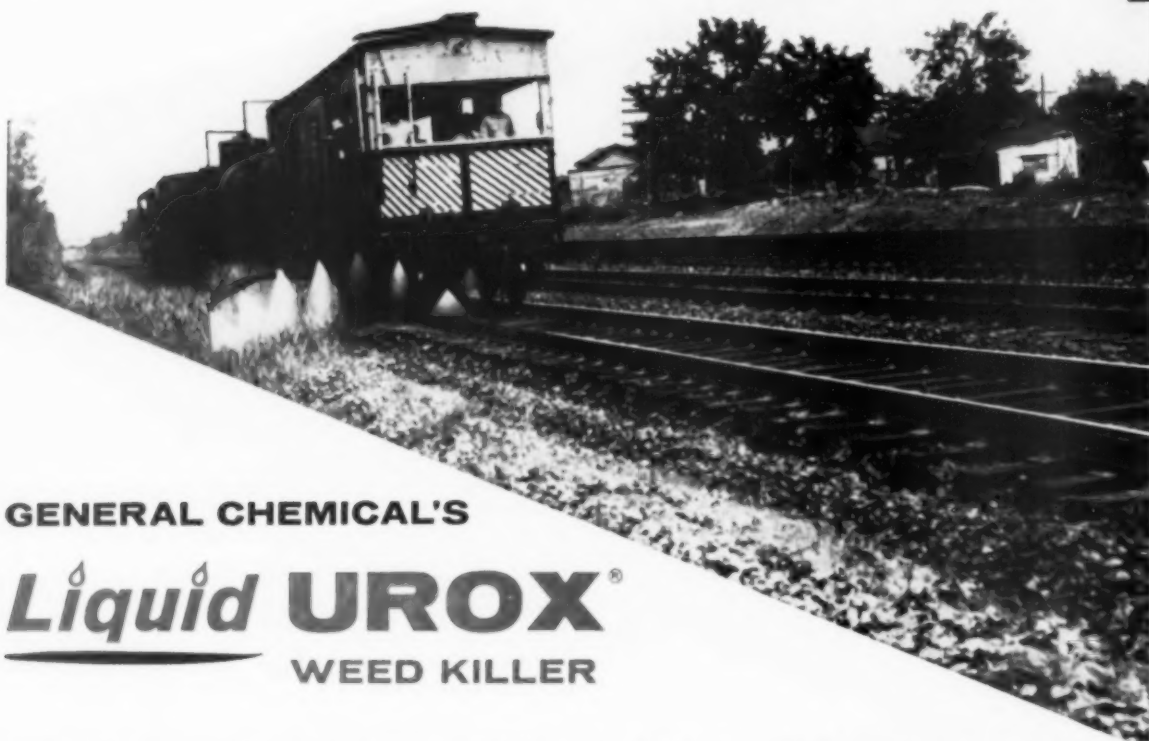
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*Roadway and Ballast Committee of American Railway Engineering Association reports: "The addition of monuron-TCA [UROX] to the oil . . . gave the quick kill of the oil followed by long residual activity . . . This was one of the outstanding materials . . . giving excellent control of both grasses and broad-leaved weeds." AREA Bulletin 542, February 1958, p. 849.



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